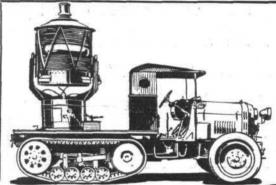


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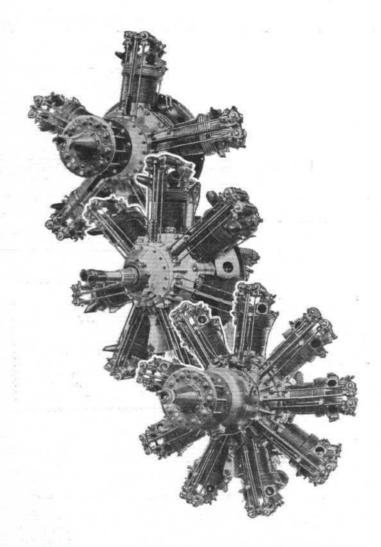
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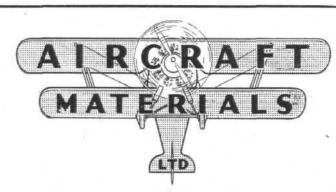
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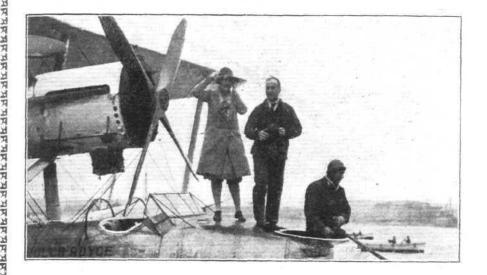
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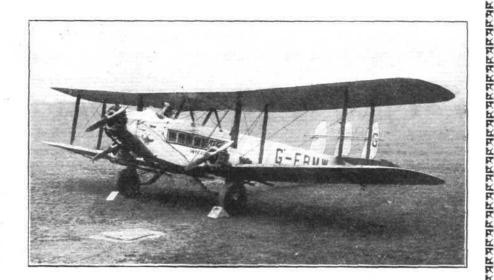


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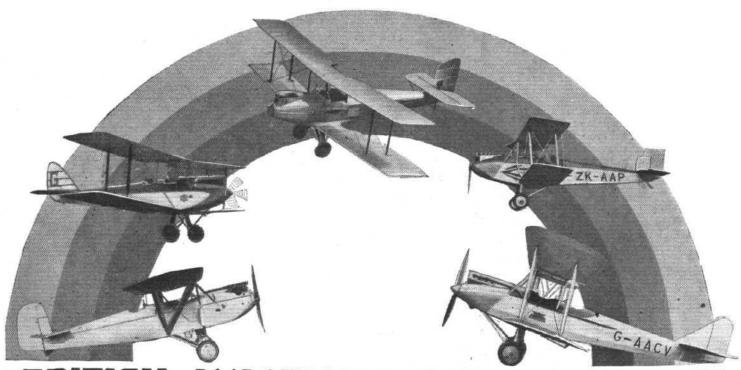
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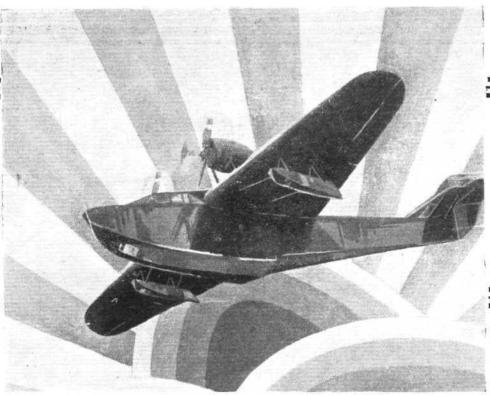
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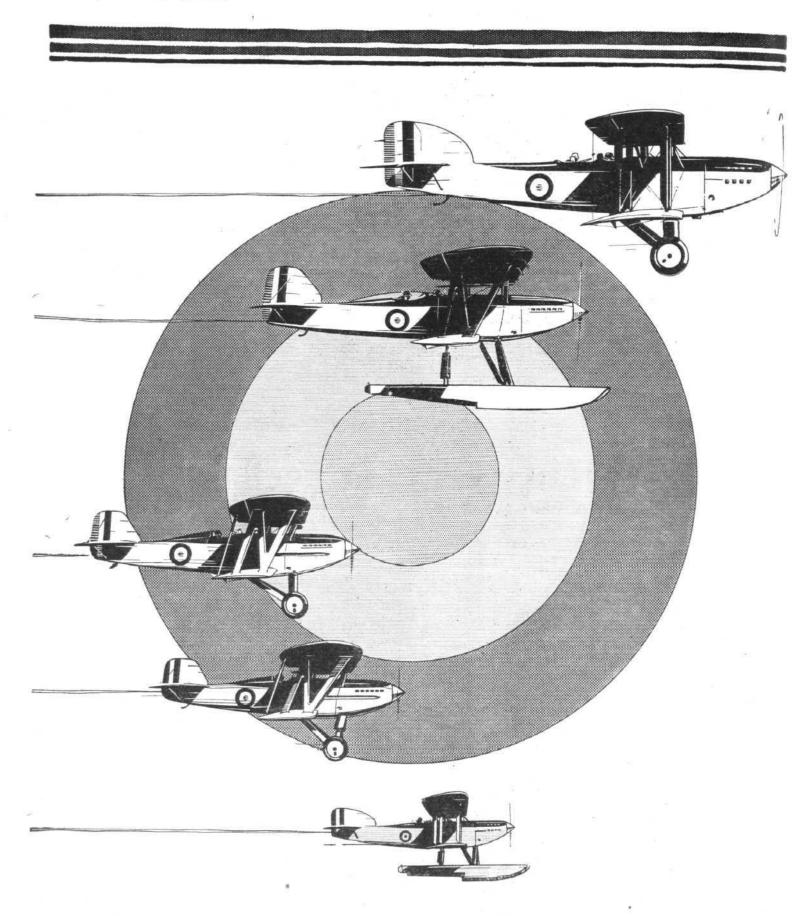
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No. 1081. (No. 37. Vol. XXI.)

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CONTENTS

Editorial Commer	at								PAG
Schneider Tro	phy ar	id Worl	d's Re	cords	**	**		122	99
Schneider Trophy	Conte	st	* *	1606	1900	3.3	330	2004	99
World's Speed Re	ecord	0.0	3.7	5.5	10.0	1010	110		101
Airisms from the	Four V	Vinds		550	17.0	2.2	1000	224	101
Aeroplane in the	Fur In	dustry		0.0	200	1909	1904		101
Air Ministry Noti	ces	087077	0.0	5.5	:0.5		10.0	2511	102
Private Flying	222	112			222	122	1979		102
Royal Air Force	600	9(9)		8.0		004	383	5274	102
Some Schneider 7	Crophy	Items	***	**					102

DIARY OF CURRENT AND FORTHCOMING EVENTS
Club Secretaries and others desirous of announcing the
dates of important fixtures are invited to send particulars
for inclusion in this list—

1929,

Sept.	14	 Leicestershire	Aero	Club	Opening	Meeting.
		Desford.				5-11 ACC 1150000000000000000000000000000000000
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Sept. 14 Lancashire Aero Club "At Home, Woodford.
Sept. 14-15 Aero Club de France Meeting, La Baule.
Sept. 21 Air Rally at Haldon, Teignmouth.

Sept. 21 Air Rally at Haldon, Teignmouth.
Sept. 22 Bristol Aeroplane Club's "Farewell" Garden
Party, Filton.

Sept. 28 Northampton Aero Club Meeting, Sywell.
Oct. 1 Gordon-Bennett Balloon Race. St. L.

Oct. 1 Gordon-Bennett Balloon Race, St. Louis,
U.S.A.
Oct. 5 Newcastle Air Pageant, Cramlington

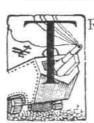
Oct. 10 Aerodrome.

Air Pageant and Light 'Plane Race, Hull

Municipal Aerodrome.

Oct. 31 Guggenheim Safe-Aircraft Competition Closes.

EDITORIAL COMMENT



RULY a great week for Britain; indeed, one of the greatest in the history of British aviation. First, the beating, twice within less than one hour, of the world's speed records over the 50-km. and 100-km. closed circuits and the winning of the Schneider Trophy Contest. Then, on Tuesday last, the

establishment of two world's records for speed over the 3-km. straight-line course! These are accomplishments of which every Briton is entitled to be

Schneider proud. Luck played a part in so far as the Italians were certainly lamenand World's tably unfortunate. But luck had nothing whatever to do with the fact that all

three British machines completed the most strenuous flying test in the world, the 350-km. Schneider course. That was due entirely to British skill in design and to the superb quality of British work-

manship.

The Rolls-Royce engines in the new Supermarine S.6's were of an entirely new type, and the type has actually been developed and perfected in less than one year-something like nine months. Under the circumstances, one might well have been forgiven for entertaining at least some slight anxiety concerning the staying power of the new engines. That both ran without a single hitch throughout the Schneider Contest is proof that the Rolls-Royce "R" engine is well beyond the experimental stage. And in this connection a few words concerning an incident that occurred may be permissible, now that the Schneider Contest is a thing of the past. On the Friday afternoon, when Waghorn returned from his navigability trials, he was asked how his engine had run, and reported some little trouble. When the machine was brought ashore, after completing its six hours mooring test, it was found that a sparking plug had broken up and that the cylinder was badly scored. Now, under the regulations it is permissible to change a cylinder, and in the "R" engine the cylinders are in blocks of six. To change one cylinder meant to change a complete block. This also was permissible,

but would there be time? The engineers got to work, and in a very few hours the block had been replaced, thus indicating the advantage of the new Rolls-

Royce form of construction.

It is now also permissible to state that in the actual Schneider Contest the Supermarine S.6's were not running their engines "all out." The fuel consumption was such that to run the engines at full throttle might have meant cutting down the reserve of fuel to a dangerous degree. The Rolls-Royce engines were therefore run at something less than their full power, and thus the speeds put up are even more remarkable. Even the world's record established over the 3-km. straight-line course is not a true indication of the very best of which the S.6 is capable. With further tuning, and perhaps with smaller floats, made possible by the smaller quantity of fuel necessary, it is likely that, splendid as is the speed record established on Tuesday last, still better results will be obtained.

The ill-fortune of the Gloster-Napier combination is by way of being a tragedy. Some slight delay in delivery put the machines a little behind, and afterwards unsuitable weather conditions prevented test flights being made for quite a long time. When at last a test flight became possible it was discovered that there was some fault in the petrol system, the exact nature of which was difficult to trace. might be due to a defect in the carburettor system, or to the shape and placing of the air intakes. Or again, possibly it was the petrol pump which was the cause of the trouble. It must be realised that with the main tanks placed in the floats, the petrol has to be lifted, by pump, a considerable distance. It seemed just possible that on sharp turns, such as would have to be made during the Schneider Contest, centrifugal force might so increase the effective distance the fuel had to be raised that a depression might be caused which would prevent the pump from functioning. Each alteration required another test flight, and thus time went by. The Napier and Gloster engineers worked like demons, but in the end they were defeated by time, and it became impossible to put any of the Gloster-Napier VI's into the Contest. The disappointment to all those who had worked so heroically on the installation must have been well-nigh heart-breaking, and everyone felt the deepest sympathy with them. At last the trouble was overcome (exactly how we have not yet learned), and on Tuesday last, Flight-Lieut. Stainforth, whose disappointment over not being in the Schneider Trophy Contest must have been keen indeed, was able to make an attempt on the world's speed record over the 3-km. straight-line course marked out over Southampton

Yet once more the fates were, apparently, against the Gloster-Napier. The visibility was far from good, and Stainforth was not able to fly such a good course

Aerodrome for the Prince of Wales

When the Prince of Wales goes into residence at Fort Belvedere, Virginia Water, he will use a portion of Smith's Lawn, Windsor Great Park, as a landing ground for his aeroplane. The surface is now being levelled and prepared and will be ready shortly.

La Baule

Entries for the two-day air display and meeting at La Baule on Saturday and Sunday next, September 14 and 15, are said to include Schreck F.B.A. and 17; Bleriot 195; Nieuport Delage 641-H; Liore and Olivier LeO H.190, 18, and 19; Farman Goliaths; and Portuguese Navy Macchi's.

as he would have done under more favourable conditions. In spite of this, however, he beat the record of 318.6 m.p.h. established by de Bernardi last year by a very handsome margin, his average of four runs being the impressive speed of 336.23 m.p.h. This figure, there is not the slightest doubt, can be substantially improved upon, and we hope another

attempt will be made later.

When Stainforth had finished his record flight. Sqdn.-Ldr. Orlebar took out Waghorn's S.6, under slightly better, but still far from ideal, weather In spite of the indifferent visibility, conditions. and with the Schneider floats, the Supermarine S.6 did an average speed of no less than 355.8 m.p.h. In other words, on several occasions the S.6 must have been travelling at well over 6 miles per minute! Again, the figure can probably be improved, but even if it is not, it will be no easy one for our friends the Italians to beat. That they will try, and try hard, is not to be doubted. And if they do, Great Britain still has a little in hand wherewith to go one

That the Italians should have been so unfortunate in the Schneider Contest is very much to be deplored, as the contest gave no basis for comparing the Italian machines with our own. That they should, after all their troubles and difficulties, have decided to bring their machines to England and to race them in the Schneider Contest is a sporting gesture which we in this country appreciate to the full, and we are quite certain that the meeting of the two teams, and of a large number of other personalities, will have done a great deal to cement the friendship between the two nations. As Mr. MacDonald said at the banquet on the Orford: "It is unfortunate that it is impossible for one side to win without the other having to lose. But such is sport; and after it is all over, the contesting parties are closer and better friends than ever before." That, we think, voices the general feeling very well indeed, and we thank the Italians for the very sporting way in which they did their More than that no man can do, and level best. next time they may be more fortunate and have more luck, as they richly deserve.

Finally, we should, one and all, be thankful that the Schneider Trophy Contest passed off without any serious accident. Monti's scalds, while doubtless very painful, are not regarded as serious. contest like the Schneider gives ample opportunity for serious mishaps, and if there was any element of luck in the 1929 Schneider it was the unprecedented weather conditions on the day of the Contest. we had it in our power to order the weather conditions in the greatest detail, we could not have improved upon them. And so ends an aviation event which, from the technical if not from the spectacular point of view, was one of the greatest in the history of

aviation.

Office up to midnight.

The Bleriot 195 is the Bleriot transatlantic machine that M. Bleriot, Jnr., was to have attempted the Atlantic crossing in; it was exhibited at the Paris Salon last year and has four 250-h.p. Hispano-Suiza engines.

Brussels-London Night Air Mail A NIGHT air-mail service between Brussels and London will probably begin about September 23, under an agreement between the Belgian Postal Authorities and the Sabena Transport Co. Letters then posted in Brussels before 10 p.m. will be delivered in London by the first morning post. Letters for Brussels from London will be taken at the Central Post Office up to midnight



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TROPHY, 1929.

FIRST

SPEED M.P.H.

SUPERMARINE S.6. - 328.63

ROLLS-ROYCE ENGINE.

SUPERMARINE S.6. - 325.54

ROLLS-ROYCE ENGINE. (Disqualified for missing mark).

SECOND

MACCHI

52 BIS -

284.2

THIRD

SUPERMARINE

NAPIER ENGINE.

S.5.

282.11

SUPERMARINE SEAPLANES ENTERED. 3

SUPERMARINE SEAPLANES COMPLETED THE COURSE.

IN ADDITION

TWO WORLD'S RECORDS WERE CAPTURED:

50 kilometres SUPERMARINE S.6.

332.49 m.p.h.

100 kilometres SUPERMARINE S.6.

331.75 m.p.h.

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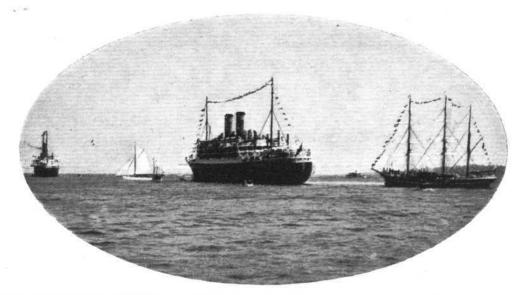
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SCHNEIDER TROPHY CONTEST

Waghorn wins at 328.63 m.p.h.

So, once more, Great Britain has scored a victory in the contest for the Schneider Seaplane Trophy. Flying Officer H. R. D. Waghorn has become the holder of the trophy, with an average speed for the 350 km. of 328.63 m.p.h. (529.1 km./h.). And Flying Officer R. L. R. Atcherley has beaten the world's speed record over the 50 km. and 100 km. closed circuit by covering the seventh lap in the Schneider course at a speed of 332.49 m.p.h. (535.31 km./h.) and the sixth and seventh at an average of 331.7 m.p.h. (534.04 km./h.) respectively. And finally, the results of the 1929 Schneider Trophy contest are summed up if it is recalled that all three British machines which took part in the contest completed the course. Truly a magnificent testimony to the quality of British aircraft and British aero engines. But for the loss of a pair of goggles, it is permissible to assume, Great Britain would have secured first, second and fourth place. As it was, the Italians gained second place, Great Britain first and third.

Italians gained second place, Great Britain first and third.

Detailed accounts of the navigability trials and the contest itself will be given later. In the meantime it is thought that a brief summary here will be welcomed by those who desire merely to consult the actual figures of speeds put up in the contest by the various competitors.

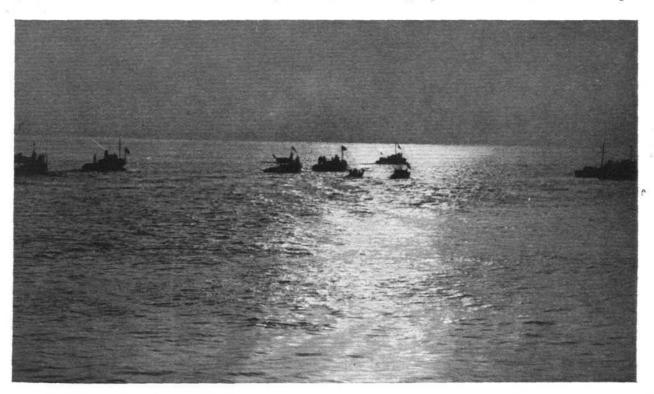
In the following tables the first column gives the number of the laps, the second the cumulative time for the laps, and the third the speed for each lap. At the end of each table is given the average speed for the seven laps.

Flying Officer H. R. D. Waghorn

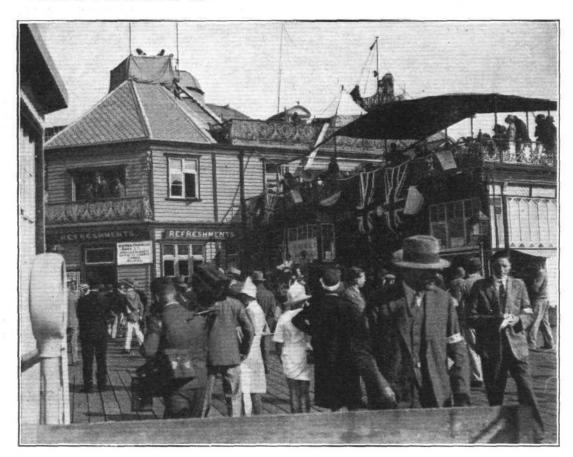
Lap	Cumulative Tir	ne Speed for Lap
77	m. s.	m.p.h.
1	5 45 1/5	
2	11 25	329.54
$\frac{1}{2}$	17 2 4/5	331 - 1
4	22 43 4/5	328
5	28 22 4/5	329.93
4 5 6 7	34 4 4/5	327.04
7	39 42 4/5	330.91
Av	erage speed for whole cour	se: 328.63 m.p.h.

Warrant Officer Dal Molin

	(1927	Mac	chi,	Type M.52)	-
1	1234			4/5	$286 \cdot 2$
2		13	0	4/5	$286 \cdot 78$
3		19	32	3/5	$285 \cdot 45$
4				1/5	$282 \cdot 7$
5		32	43	1/5	283 - 16
6		39	18	2/5	283.0
7		45	54	2/5	282 - 44
	Average Speed for				1.2 m.p.h.



FRIDAY MORNING, SEPTEMBER 6: The machines going out on their pontoons in readiness for the Navigability Trials. In the heading block at the top of the page the Orient liner "Orford" is seen in the centre, with Mr. Guiness's yacht "Fantome II" on the right. ("Flight" Photos.)



On Ryde Pier: The timekeepers and Broadcast Commentators were stationed on the roof. ("FLIGHT" Photo.)

	sht Lieuten ermarine-Na		cy Greig apier " Lion ")
Lap			Speed for Lap
	m.	S.	m.p.h.
1	6	34 1/5	$283 \cdot 73$
2	13	10 3/5	$282 \cdot 16$
2 3	19	47	282 · 16
4	26	24 2/5	281:41
4 5	33	2	281.31
6	39	39 4/5	281 - 16
7		15 1/5	282.87
Average S	Speed for wh	ole course	: 282-11 m.p.h.

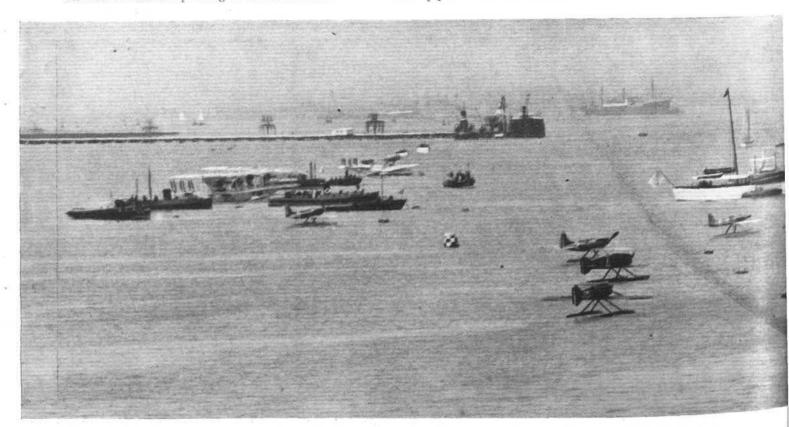
Lieutenant Cadringher
(Macchi Type M.67, Isotta-Fraschini)
6 34 284
Retired on second lap owing to exhaust fumes.

		-Rolls Roye	
Lap	Cumu	lative Time	Speed for Lap
	m.	S.	m.p.h.
1	6	9 4/5	302 - 45
2	11	54 2/5	$324 \cdot 56$
3	17	33 3/5	329.74
2 3 4	23	10	332-49
5	28	50 3/5	328 - 39
6	34	38 3/5	330 - 91
7	40	5	332 - 49

Lieutenant Monti
(Macchi Type M.67, Isotta-Fraschini)

1 6 11 301

Retired on second lap; forced landing due to broken water pipe. Pilot was scalded.



"SITTERS": The six machines at their buoys

More than a casual Interest: The technical staff of the Supermarine Aviation works had chartered the steamer "Monarch" to serve as a grand-stand in the middle of the Schneider course.

(" FLIGHT " Photo.)



With this brief summary of the contest results, we will return to pick up the "story" at Calshot during the days preceding the navigability trials, commencing the diary of

our special representative with Wednesday morning, September 4. This diary is included so as to complete the history of the preparations for the contest.

SCHNEIDER TROPHY TRAINING

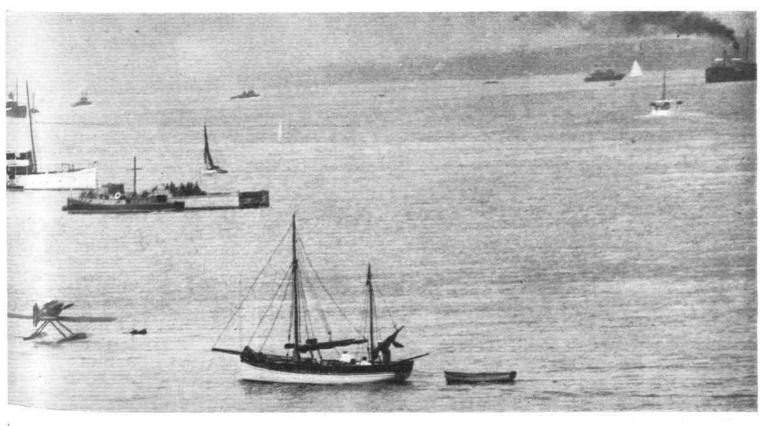
By MAJOR F. A. de V. ROBERTSON, V.D.

Calshot, Wednesday, September 4.—A day full of incident. The heat was intense, and a haze hung over the whole area in the morning. During the night the Supermarine Napier S5, N 219, and the Supermarine Rolls Royce S 6, N 248, returned from Woolston to Calshot. The Savoia was wheeled out in

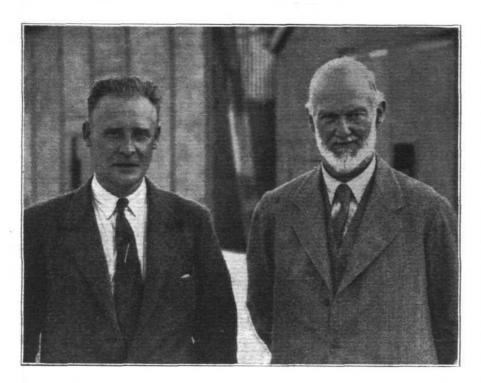
the morning, and one engine was run up, but it did not give satisfaction and the machine was taken back to the shed.

Orlebar went up on a Flycatcher to examine the weather, but nothing of importance happened until 1 p.m.

Lieutenant Monti was then lowered down the southern



ing the 6 hours' watertightness test. ("FLIGHT" Photo.)

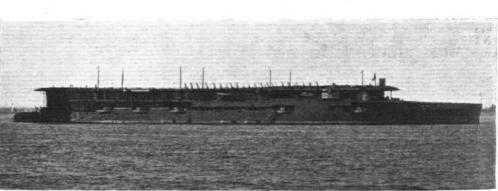


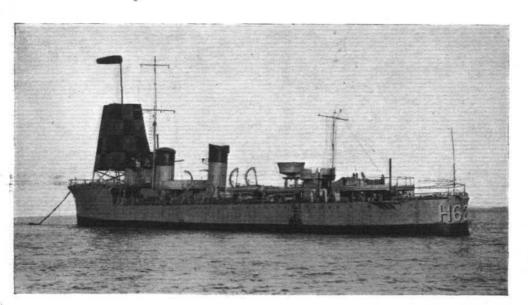
slipway in one of the Macchi 67 machines. Just as he was launched a private motor-boat dashed across his path and churned up the water. It is gratifying to note that in the evening the Air Ministry issued an official request to such surface craft to show a little consideration for Schneider seaplanes. Then the *Majestic* hove in sight in charge of two tugs, but she obeyed the signals to slow up, and Monti taxied across her bows. He took off hurriedly, but very quickly landed again and was towed in with a flying wire broken. This was the first flight at Calshot of one of the new Italian racers.

The Episode of the Louvres

N 248 had come back with small vanes called louvres, fitted to her floats. Mr. Mitchell tried them as an experi-

Above, two famous Designers: On the left, Mr. R. J. Mitchell, who designed the Supermarine S.6, which won the race, and on the right Mr. F. H. Royce, head of the Rolls-Royce firm, which designed and built the engine in the winning machine. ("FLIGHT" Photo.)





ment to cure the machine of her habit of dipping her tail at critical moments. This brought the machine back into Orlebar's charge, and at 3 p.m. he took her out to try the effect of the louvres. They were not a success. They produced a most violent pitching whenever Orlebar opened his throttle, and I wonder he was not seasick. So the machine was brought back and the louvres were removed.

Maresciallo Dal Molin wentround the course in the Moor of Venice, and put in the only completely successful flight of the day.

Bad Luck for Great Britain

At 4 p.m. the other S 6, N 247, was launched with Waghorn in the cockpit. She had, I doubt not, a full load of fuel, and at first Waghorn found her a bit inclined to porpoise. He promptly reduced her to order, and then with fine judgment he made a very long run of 40 seconds. He made a very fine flight, too, and British hopes, which had been sinking somewhat of late, began to rise. Then they dropped again. Waghorn climbed high over Hamble and throttled down his engine. He did an S gliding turn and prepared to land near his tow launch in Southampton Water. There was a good deal of shipping about at the time, and the visibility cannot have been too good. He misjudged things

have been too good. He misjudged things a bit and pancaked down a few feet. The machine reared up on the tails of her floats and then came down with a smack on the water. The propeller stopped suddenly and the machine began to drift helplessly. First she fouled a passing tug and damaged her port wing tip slightly. The propeller and one float also suffered slight damage. Waghorn got out quickly on to the port float just in time to avert another collision with an anchored barge. The experts say that the damage is easily repairable.

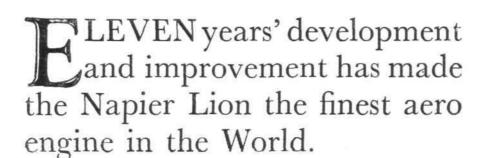
Between 7 and 8 p.m., with the light failing fast, two machines were towed out and started their engines. Atcherley was in S 6, N 248, with the louvres removed, and Lieutenant Cadringher was in a Macchi 67. Neither made any attempt to take off, much to the relief of the onlookers.

That evening the representatives of the British Press

Not a thing of beauty, but a very useful adjunct to flying: The aircraft carrier "Furious" forms a splendid grandstand for the Schneider Trophy Contest. ("FLIGHT" Photo.)

Sent to try the Pilots: The turning points were in the form of pylons erected on war vessels. This is the one off West Cowes.

(" FLIGHT " Photo.)



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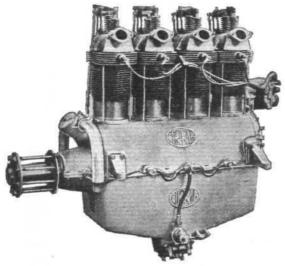
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entertained both teams and also the Italian Press representatives to dinner in the marquee on the station. The N.A.A.F.I. provided an excellent meal. Maj. C. C. Turner was in the chair, and a most enjoyable evening was spent. A rag-time band performed after dinner, but found it hard to express the result of the Figure 1. compete with the roar of the Fiat engine which was being run up

A Punctured Float

Thursday, September 5.—The day was hotter than ever and in the early morning the mist was like a London fog. But about 10 a.m. Dal Molin went up in the Macchi 52 with which Bernardi had put up his world's record. He flew beautifully, and made an excellent landing, with very poor visibility, opposite Calshot in Southampton Water. At once his starboard float began to sink. All the motor boats available rushed to his assistance, and with great difficulty the seaplane was got on to a British pontoon and brought ashore. There was a 6-in, rent underneath near the step, and had he landed far away from help the machine must have capsized.

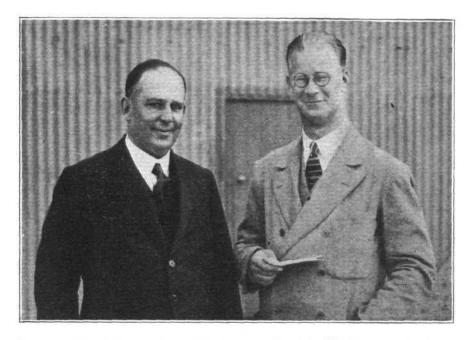
Good Flying

At 12.45 Atcherley took off in S 6, N 248. He has now got the hang of the machine with full load in her floats, and after a long run he got off well and flew in excellent style for 15 minutes. He was never quite full out, but the way he held his machine down on banking turns was much admired.

His landing was excellent. Lieut. Cadringher tried to get a Macchi 67 with three-bladed propeller off at the same time. But after pitching about in a similar way when taxying, he gave it up.

Stainforth Flies the Gloster Napier

At 1.45 Stainforth took up the Gloster-Napier, N 250, with a full load of petrol. This was the first flight of this pilot in one of this year's machines. His take off and landing



Temporarily defeated but still game: Captain Wilkinson, Napier's chief designer, and Mr. Folland, Gloster's chief engineer and designer, had the most atrocious bad luck in being slightly delayed and, in consequence, being unable to put right in time some trouble with the petrol system. This kept the Gloster-Napier VI out of the Schneider Contest, but the machine has since established a world's speed record.

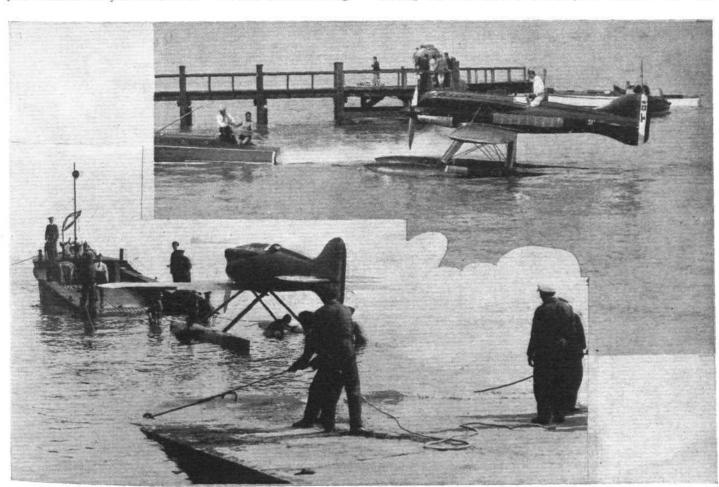
("FLIGHT" Photo.)

were alike excellent, but he only stayed up for about five minutes. The machine was shedded again and examined,

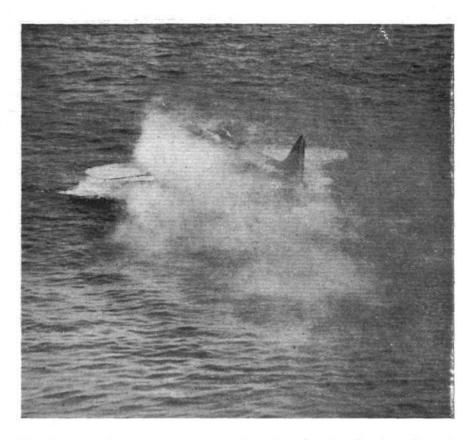
but, after a certain time, work—furious work—was concentrated upon her sister N 249.

During the afternoon Sir Samuel and Lady Maud Hoare visited Calshot. Sir Philip Sassoon was here, and Sir Hugh Trenchard, in mufti. Mr. Montague, Under Secretary for Air, was flown round the course in a Southampton.

During the afternoon a twin-engined Dornier Wal was



TWO ITALIAN COMPETITORS: Above, the Macchi M.67 (No. 7) coming in after a test flight. Below, the Macchi M.52 being beached after damaging a float. ("FLIGHT" Photos.)



Keeping cool in the hot weather: Squadron-Leader Orlebar, Captain of the British Schneider Team, going out for a test flight in one of the Supermarine-Rolls Royce S.6's. ("FLIGHT" Photo.)

seen flying over the Solent. In the evening a twin-engined twin-hull Savoia came over and landed, somewhat bumpily, at Calshot. The pilot saved the situation by opening up his engines and making a second and better landing; but General Balbo almost raved at the exhibition.

The Evening Flights

In the evening the Supermarine Napier S 5, N 219, was towed out for D'Arcy Greig to fly. His engine was started but promptly stopped and the flight was abandoned. This was a disappointment to everybody, but doubtless this well-tried type will perform well on Friday and Saturday, and D'Arcy Greig knows how to get the very best out of it. Another dramatic flight took place in the late evening when Stainforth took up the Gloster-Napier 6, N 250, for a final test. It proved after all to be N 250 and not N 249 which was tested. Stainforth got off at 7.22 p.m. Though the floats with full load ride

Another dramatic flight took place in the late evening when Stainforth took up the Gloster-Napier 6, N 250, for a final test. It proved after all to be N 250 and not N 249 which was tested. Stainforth got off at 7.22 p.m. Though the floats with full load ride deep in the water when towing, this machine behaves perfectly when taxying. Stainforth handled her perfectly too, and got off in 20 seconds or less. He climbed to about 4,000 ft. and then gave one burst of moderate speed at about three-quarter throttle. He did not repeat this but throttled well down, and flew round and round the area almost as slowly as the machine would fly. Then, after 20 mins., in dark gloaming, he made a wonderfully perfect landing. In every way he had given a most finished exhibition of his quality as a pilot.

After the flight the experts traced the trouble to the petrol pump. Efforts will be made to remedy this tomorrow.

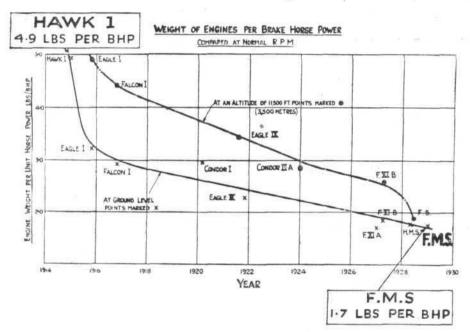


AIRMINDEDNESS: One or two people gathered on the beach at Southsea to watch the Schneider Trophy Contest.

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The Teams

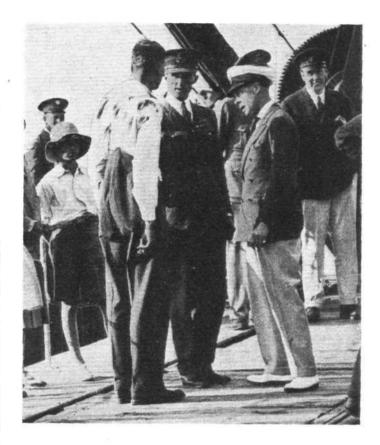
The order of starting was announced late this evening :-

 Flying Officer Waghorn, Supermarine Rolls Royce S 6.
 Mareschiallo T. Dal Molin, Macchi 52, Fiat.
 Flight-Lieut. D'Arcy Greig, Supermarine-Napier S 5. 4. Tenente R. Cadringher, Macchi 67, Isotta Fraschini.
5. Flying Officer Atcherley, Supermarine Rolls Royce S 6.
6. Tenente Monti, Macchi 67, Isotta Fraschini.
British reserve: Flight.-Lieut. Stainforth, Gloster Napier 6.

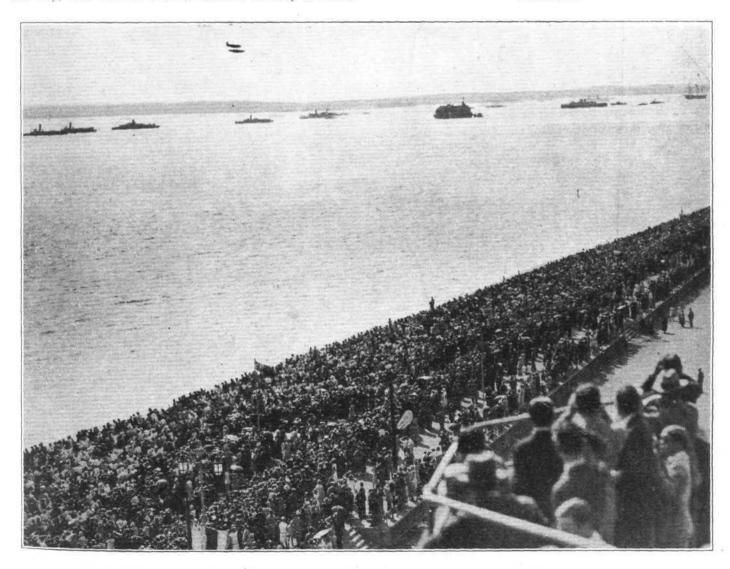
Italian reserve: Sergente Maggiore F. Agello, Macchi 52,

THE NAVIGABILITY AND WATER-TIGHTNESS TRIALS

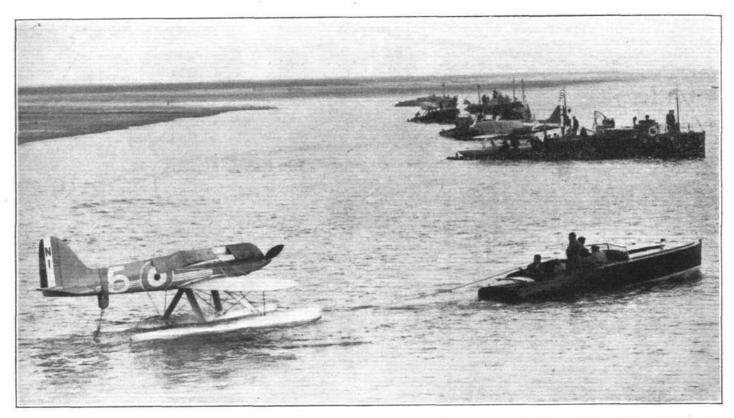
A FTER Thursday's insufferable heat, the cool mist of early morning on Friday, September 6, was most gratifying. This was the day of the navigability and water-tightness tests, and competitors were to be in readiness to go out by 7 a.m. The six machines nominated for the trials and actual contest were: Two Supermarine-Rolls-Royce S.6's and one Supermarine-Napier S.5, marine-Rolls-Royce S.6's and one Supermarine-Napier S.5, two Macchi M.67's and one Macchi M.52. Of the two S.6's, one, N.247, carried the number 2, and was to be piloted by Waghorn, while the other, N.248, was No. 8 in the contest and was to be flown by Atcherley. The S.5 (N.219) very appropriately carried the number 5, and was to be piloted by D'Arcy Greig. The two Gloster-Napier VI's had not got over their petrol system troubles, and were thus debarred from the contest. After the work—heroic work would not be too strong an expression to use—put in by the Napier and too strong an expression to use-put in by the Napier and Gloster riggers and engineers, it must have been absolutely heartbreaking to see all their efforts of no avail. The fates were against them, and the golden Gloster would have to stand down. These men deserve all the sympathy one can possibly extend to them. For weeks they had worked, night and day, with but the briefest snatches of sleep and rest.



Royal Appreciation: H.R.H. the Prince of Wales chatting with Flying Officer Atcherley and Squadron-Leader Orlebar. On the right may be seen "British Aviator's Certificate No. 1," Lieut.-Col. Moore Brabazon.



LAND, SEA AND AIR: The crowds on the beach at Southsea watch Waghorn flash past. 1003



READY FOR THE FRAY: The Supermarine machines going out to the navigability trials. The S.5 in the foreground and the two S.6's a little farther from the camera. ("FLIGHT" Photo.)



THE PRELIMINARIES: The Macchi M.67, No. 10, piloted in the Contest by Monti, on the pontoon and, in the lower picture, departing for its navigability trials. Above General Balbo, Italian Under Secretary for Air, may be seen directing operations. ("Flight" Photos.)



The highest speed ever attained by man—

328-63

miles per hour.

SCHNEIDER TROPHY WON

SUPERMARINE ROLLS-ROYCE S6

Pilot; FLYING OFFICER H. R. D. WAGHORN

using



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CONGRATULATIONS to Flying-Officer H. R. D. Waghorn, The Supermarine Aviation Co., Ltd., and Messrs. Rolls Royce, Ltd., on their splendid achievement in winning the Trophy again for Great Britain.

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Average speed 281.65 m.p.h.
Winner at Venice, 1927.

1929

Supermarine Rolls-Royce "S.6." WON—Flying Officer Waghorn 328.63 m.p.h. Fastest Lap—Flying Officer Atcherley 332.49 m.p.h. (Subject to official confirmation.)

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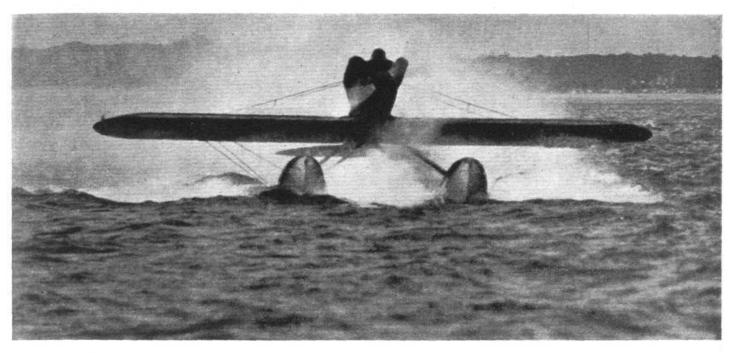
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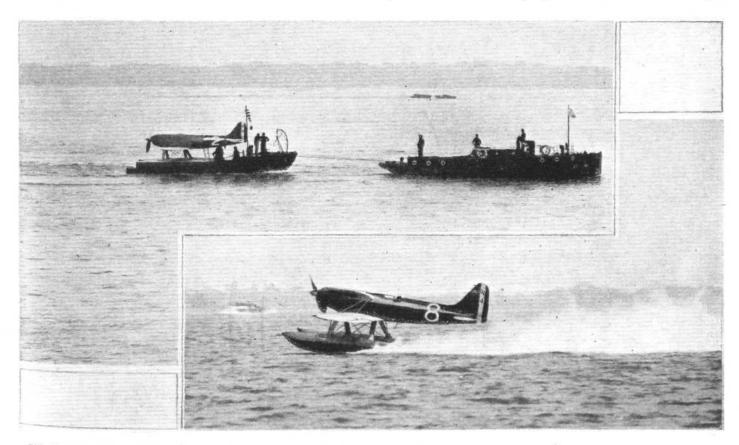
"NOT LESS THAN 12 KNOTS": The Macchi 67, No. 10, piloted by Monti, taxying in the Navigability Trials.

What their feelings must have been when they saw the other six machines go out can readily be imagined.

The first machine out on Friday morning was the Macchi M.67 (No. 10), which was to be flown by Monti. It was followed a few minutes later by the 1927 Macchi M.52 (No. 4). Before 8 a.m. both these machines were on their pontoon and being taken towards Calshot lighthouse, south-east of which the navigability trials were to take place. The three Supermarine monoplanes, two S.6's and one S.5, were next to go, all three being on their pontoons and en route by 7.50 a.m.

By the kindness of Mr. Allingham we were able to see a good deal of the navigability trials, he having offered us a "lift" in his "Hoval Standard" high-speed motor boat. A line marked by boats indicated the "lane" down which

the machines had to alight and taxy, but a shift in the wind necessitated a change in the course. While the mark boats were proceeding to their new stations it was a matter of some difficulty to know where one was, and several fast motor boats must, quite ignorantly, have found themselves right in the landing lane. However, by 9.15 the course was clear, and Flying Officer Waghorn, on the S.6 No. 2, was given the signal to start. He got off very well in spite of the rather nasty lop that was running, a result of the meeting of the tides at the particular spot chosen for the trials. After making a circuit during which he flew over portions of the Isle of Wight, Waghorn came in to alight towards the line. His landing was excellent, but in slowing down for the half-mile taxying test at not less than 12 knots he let the floats sink right in, and his first taxying test was not a little "dirty,"



IN THE NAVIGABILITY TRIALS: Waghorn's Supermarine S.6 going out, and Atcherley's S.6 taxying.

("FLIGHT" Photos.)



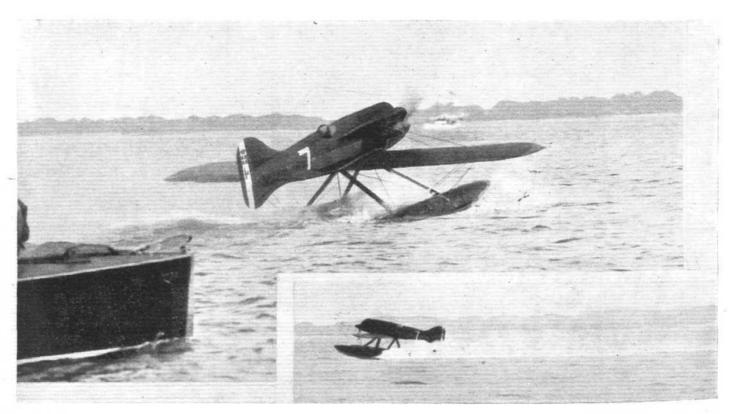
NAVIGABILITY TESTS COMPLETED: Dal Molin, on Macchi M.52, being towed to his buoy for the 6 hours' watertightness test. ("Flight" Photo.)

the water flying over him in sheets. He got away again, however, with some little difficulty, and made another circuit. The second landing was also perfect, but this time Waghorn did not let the machine sink in but kept it on the steps, with the result that his second taxying was well above 12 knots! This, of course, is perfectly permissible, as no limit is set to the speed at which the machine may travel provided its floats do not leave the water, which Waghorn's certainly did not. After a final circuit Waghorn landed, taxied across the line, and was finished provided his floats had not sprung a leak.

The other machines now followed one by one, the Macchi M.52 of Dal Molin coming after Waghorn. It passed its test without any difficulty, as did also the second Supermarine S.6 and the Supermarine S.5. The Macchi M.67 (No. 10)

was less fortunate. His take-off was attended by considerable difficulty, and he rather "chased his tail" in circles. At this point the British Navy decided to take a hand, and the *Iron Duke* came barging right across the landing lane. The *Medea* must have felt very proud for once to be able to tell the *Iron Duke* to clear out. In the meantime, the presence

The Medea must have felt very proud for once to be able to tell the Iron Duke to clear out. In the meantime, the presence of the great warship was not exactly conducive to smooth landings, and the Macchi No. 10 had to chase around among the small craft a good deal as a result. However, he finally got away. From Calshot it appeared that at first the pilot had assumed the wind to be north, as it was at Calshot when he left there. Actually it was easterly where the trials were being held. As soon as the Macchi No. 10 was faced east and "given the gun," she took off without any fuss at all. The subsequent landings and taxyings were done from



"NAVIGABILITY TRIALS: The Macchi type M.67 (No. 7) with three-bladed airscrew taxying and landing. ("FLIGHT" Photos.)

SCHNEIDER TROPHY

Great British Triumph

On September 7th, 1929, Flying-Officer Waghorn, flying a Supermarine Rolls-Royce S.6 Seaplane over a 350 kilometres course, averaged 328.63 miles per hour. This is the fastest speed ever attained by any aircraft of any nation.

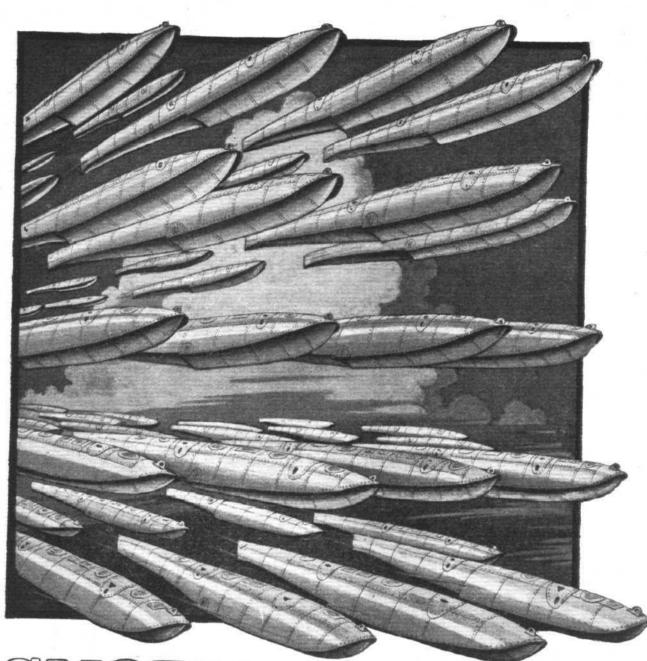
On the same date and also flying a Supermarine Rolls-Royce Seaplane, Flying Officer R. L. R. Atcherley achieved a speed of 332 miles per hour, thus breaking the 50 and 100 kilometres world's speed records.

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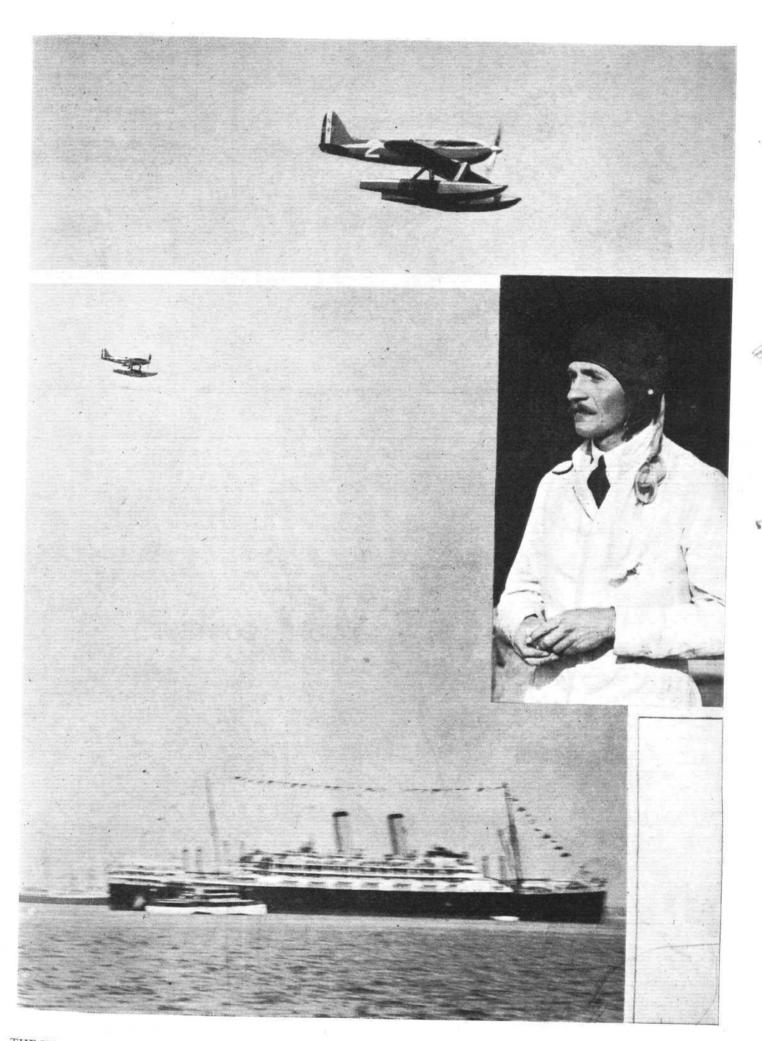
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THE WINNER OF THE 1929 SCHNEIDER TROPHY CONTEST: Flying Officer H. R. D. Waghorn (inset) crosses the finishing line over the Orient liner "Orford," after having covered the 350 km. course at an average speed of 328-63 m.p.h. He was flying an all-metal Supermarine S.6 monoplane, fitted with Rolls-Royce "R" type racing engine. ("FLIGHT" Photos.)



A "Sticker,": Warrant Officer Dal Molin was the only Italian competitor to complete the course, piloting a 1927 Macchi M.52. His average speed for the course was 284 2 m.p.h.

("FLIGHT" Photos.)

south to north (more or less), but all the take-offs towards the east.

No. 7, a Macchi M.67, distinguishable from the M.67 No. 10 chiefly by having a three-bladed airscrew, had not been in the air before the day of the trials, and there was some speculation concerning how she would fare. Actually she did very well, and passed the navigability trials without fuss. There now remained only the six hours' mooring test to ensure that the floats of the competing machines had not sprung leaks during the pounding they got in the navigability tests. For the mooring test the machines were brought back to Calshot and moored to buoys in the little bay north

of the station, where they were well protected from the elements, but not from the ubiquitous speed-boats, a number of which would insist on going past at full speed, sending out a wash which, if not actually constituting a risk to the Schneider machines, was totally unnecessary. The words sportsmanship and consideration for others do not appear to have much meaning to many of these modern "marine motorists" (priceless expression).

motorists" (priceless expression).

By about 6 p.m. all the six machines had completed their six hours' "sitting," and were allowed to be taken to their sheds in readiness for the morrow's great adventure. None

of the six had leaky floats.

THE ACTUAL SCHNEIDER CONTEST

THE little town of Ryde on the Isle of Wight presented a gay spectacle on Saturday morning, September 7. The town was beflagged and the weather was perfect. A light easterly wind of about 10 m.p.h. swept the morning mists away, and soon the visibility was such that, although a haze hung over the more distant horizon, Portsmouth and Southsea were clearly visible, while the pylon marking the turning point off West Cowes could just be discerned in the mist. The turning point off Sea View was clearly visible, but that off Hayling Island was too far away to be located.

Ryde pier head was all prepared for the numerous visitors expected. Enclosures had been arranged along the outer part of the pier head, and before the beginning of the contest the pier was cleared and 3s. re-admission charged. As it turned out, the pier head was singularly empty during the actual contest, the public evidently objecting to paying a guinea for admission to the enclosures when the view from the beach and promenade was just as good, and was free.

Score boards had been mounted on small swivelling cranes in such a manner that by turning the cranes the boards became visible from various parts of the pier head. Quite a neat idea. Very elaborate press arrangements had been made, one enclosure on the pier head having been set aside for press photographers, while press reporters were accommodated upstairs on the balcony of the Royal Thames Yacht Club. The timekeepers were perched in a small enclosure on the roof of the pier head pavilion, sighting wires running from a temporary mast, both outward and inward, so that whether competitors flew seaward or inland of the pier head they could be observed. As it turned out, this was a very wise precaution. Another perch on top of the pavilion contained microphones, and, during the contest, Sqdn.-Ldr. Helmore and Flight-Lieut. Ragg, who broadcast a running commentary on the contest. Loud

speakers were placed at close intervals, and as far as the press was concerned arrangements had been made for handing around to all those in the press enclosure roneoed sheets with the lap times and lap speeds as soon as these became available. Probably never in the history of British aviation have the press arrangements been so excellent at any meeting, and the Press Steward, Maj. Mayo, and his three assistants, Mr. C. P. Robertson, Mr. F. H. Jones, and Mr. Victor Paine, are to be congratulated on their wonderful organisation.

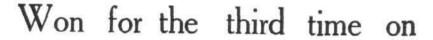
Shortly after mid-day the press enclosures began to fill up, and the time until the start passed very pleasantly with chat, speculations as to the probable winner, and with watching the scores of yachts, liners and men-of-war at rest in or approaching the various anchorages inside and around the course. The weather was ideal, and altogether it would have been quite impossible to imagine more perfect conditions for the greatest speed contest in the world.

Precisely at 2 p.m. the boom of the starting gun on the Medea was heard faintly, and exactly two minutes later Waghorn in the Supermarine Rolls-Royce S.6 (No. 2) crossed the starting line. Obviously Waghorn had wasted no time in getting into the air. He roared past at tremendous speed, but certainly the impression was not one of some 360 m.p.h., which is what the S.6 must actually have been doing at the time. And the Rolls-Royce racing engine managed to give off its 1,800 or so h.p. with surprisingly little fuss. The large gear ratio resulted in the propeller running relatively slowly and actually, from certain points of view, one could see the propeller blades, and not merely a shining shimmering blur marking the disc.

shining shimmering blur marking the disc.

Flying at a constant height of some 200 ft., Waghorn continued on his first lap, and as he sped past along the Hampshire shore the excitement grew intense. What would the speed of his first lap be? That was the question every one was asking. That first lap would give a fair indication



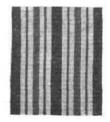


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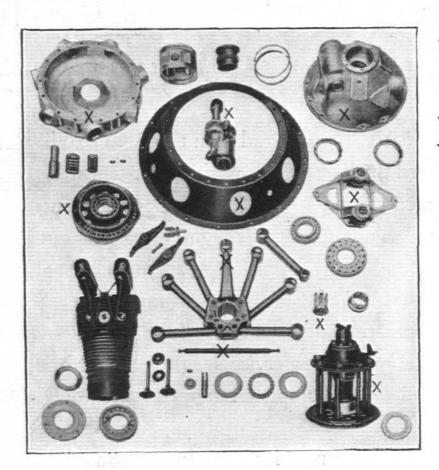


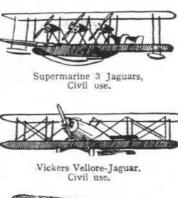
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ARMSTRONG SIDDELEY ENGINES









Nieuport-Lynx, Civil use.



Fokker VII 3M 3 Lynx, Civil use.

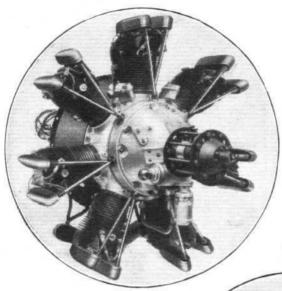
The Value of Standardisation

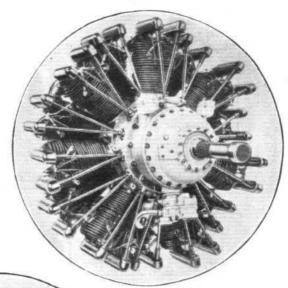
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ARMSTRONG SIDDELEY ENGINES





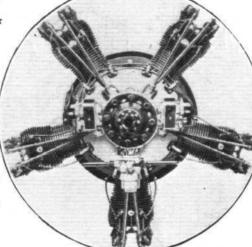
Armstrong Siddeley 7-cylinder 215-230 Lynx.



Hawker Tomtit-Mongoose, Land Training.



Fokker-Mongoose, Land Training.



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Siskin-Jaguar, Land Fighter.



Atlas- Jaguar, Land Reconnaissance.



Heinkel-Jaguar, Sea Reconnaissance.



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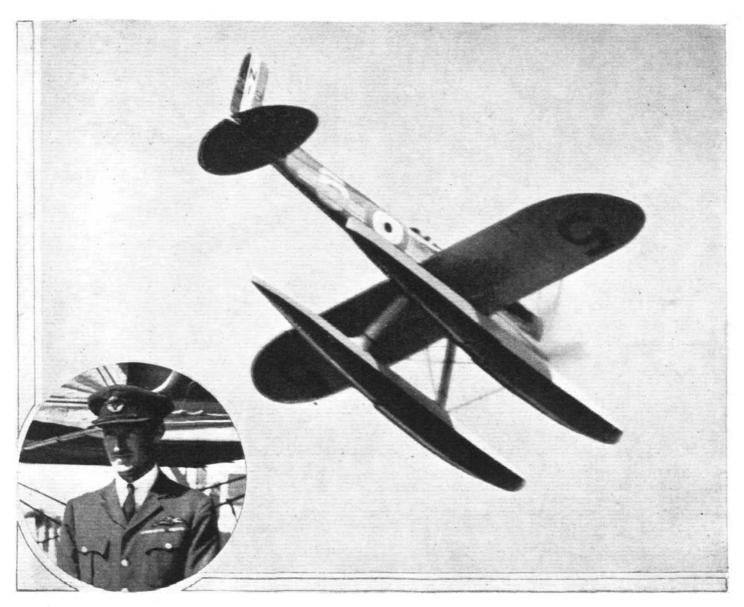
flown by Flying Officer Atcherley won the King's Cup Race at the record speed of 150.3 m.p.h., thus proving its high performance and remarkable dependability under the most difficult conditions.

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AN IMPRESSION OF SPEED: Flight-Lieut, D'Arcy Greig (inset) flying low over Ryde Pier. Average speed for course 282.11 m.p.h. ("FLIGHT" Photos.)

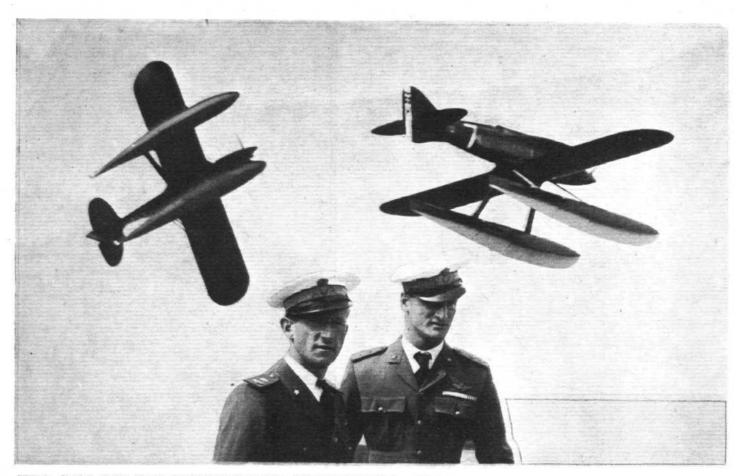
of the sort of speeds that could be expected in the contest. After a splendid turn around the West Cowes mark boat, the S.6 once more became, as it was seen by the spectators on Ryde pier, a group of three dots approaching and growing larger at a most promising rate. The machine roared across the line and disappeared towards the Seaview and Hayling Island mark boats. After a wait of a few minutes, Waghorn's speed for the first lap was announced: 324 m.p.h. In other words, he had not only established a world's record for the 50-km. closed circuit, but had beaten the speed of de Bernardi over the 3-km. straight-line course! Well done. Oh, very well done! The next question was: "Would the Rolls-Royce engine stay the course?" Watching Waghorn speed around at the same height, lap after lap, the tension eased off. The lap speeds grew at a steady rate, from 324 to 329 and to 331! More records. Both the 50-km. and the 100-km. beaten. Then in the fourth lap the speed dropped slightly to 328. Was this a sign that the engine was "tiring"?

The starting of the first Letter.

The starting of the first Italian competitor, Dal Molin, on the old Macchi 52, for a moment took our minds off Waghorn and his engine. Dal Molin flashed by the starting line with his engine seemingly screaming its defiance. About a minute afterwards Waghorn crossed the line at the end of his fourth lap, and set off as if in pursuit of the Italian. Actually there was no "racing" about it, but Waghorn's fifth lap and Dal Molin's first provided the only approach to a race. The writer of these notes timed (very roughly, of course) the two machines as they sped past a certain landmark on the Hampshire shore. Dal Molin was then some 20 seconds ahead of Waghorn. On they raced towards the West Cowes turning point, at which, seen from Ryde pier, they appeared very close together. The two specks approached the line, but as both machines were "head on" to the observers at Ryde it was difficult to see which was in front. The line

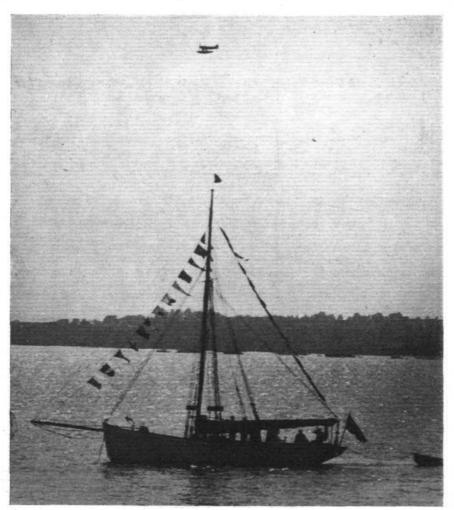
was approached, and as the view turned from a head on to a three-quarter front, it could be seen that Waghorn was leading. Good old "Wagger"! A rousing cheer went up. Once more one had time to study the score board and listen to the broadcast announcements. Waghorn's lap speeds were steady around 330 m.p.h., the sixth dropping to 327, but rising again in the seventh to 331. As the S.6 crossed the finishing line the spectators drew a sigh of relief. The Rolls-Royce engine had "stood the racket" for 40 minutes and thus upheld the reputation of an old and famous firm. The average speed for the whole course was 328.63 m.p.h. Just before Waghorn crossed the finishing line D'Arcy Greig, on the Supermarine-Napier S.5 of 1927 started on his first lap. Among those "in the know" it became a matter of considerable interest to learn which of the two old horses of 1927 was the faster, the S.5 or the Macchi M.52. Both pilots were keeping a splendid course, Dal Molin flying very low, but appearing to sideslip upwards on his turns. The lap speeds of both were remarkably consistent, those of Dal Molin being, in round figures, 286, 287, 285, 283, 283, 283, 282 m.p.h. Greig's speeds on the S.5 were 284, 282, 281, 281, 281, 283 m.p.h. Thus the Italian machine was evidently consistently faster, although not by much, than the S.5. The average speeds for the whole course were: D'Arcy Greig 282.11 m.p.h. Dal Molin 284.2 m.p.h.

Whatever was the impression of the general public, those with a fairly intimate knowledge of aviation did not lack excitement, for while Dal Molin was still lapping, the first of the Macchi M.67's started, and the great question was what would be the speed of the first of the new Italian machines. Cadringher, on Macchi No. 7, flashed across the line, his engine given out an ear-piercing scream. Flying very low, at something like 50 ft., he followed Dal Molin around. Along the Hampshire shore he did not appear to be catching up very fast with his compatriot, and when both



TWO GALLANT BUT UNFORTUNATE CHALLENGERS: Flying Officer Cadringher (left) and Lieutenant Monti both had to retire, the former owing to exhaust fumes and the latter with a broken water pipe. Monti was scalded rather badly by the hot water.

("FLIGHT" Photos.)

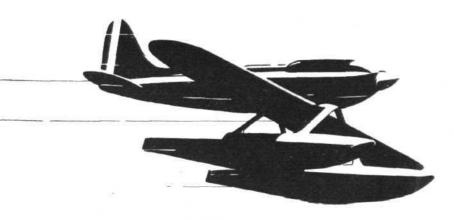


ALONG THE HAMPSHIRE COAST: Flying Officer Waghorn heading for the West Cowes turning point. ("FLIGHT" Photo.)

approached Ryde towards the end of Cadringher's first lap, Dal Molin was still in the He should not have been if the Macchi 67 was anywhere near as fast as our S.6. His engine was smoking a lot, but with a determination to do his best Cadringher continued at the same low altitude as before. He approached the West Cowes mark boat, but instead of rounding it in the usual way. he swung wide, returned across the course, and finally disappeared in the haze towards Calshot. Obviously, he was retiring. It was learnt later that the exhaust fumes blinded and suffocated him. Every one was sincerely sorry that Italy's first new type should thus be out of the running. But he had obviously not been going at all well, and when his lap speed was announced to be only that of the M.52, i.e., 284 m.p.h., there was proof that something was very much wrong, it being obvious that the machine

should be very much faster than that.

A few seconds after Greig had finished on the S.5, Atcherley crossed the starting line on the second Supermarine S.6 (No. 8). Atcherley flew behind the pavilion, and the foresight of the timekeepers in arranging for a sighting line on Ryde church tower for such an emergency was thus justified. The second time around Atcherley flew in front of the pavilion, i.e., to the seaward of it. His speed on the first lap was rather disappointing after Waghorn's splendid performance, i.e., 302.5 m.p.h. Approaching the line the third time around Atcherley was too far out, right out over the anchorages, and had to do a turn to the right to get inside the Seaview turning point. Altogether Atcherley does not appear to be flying a very good course, and it is not, of course, until after he has finished that it is learned that he lost his goggles and therefore was compelled to navigate by such oblique views as he could get through the windscreen. His lap speeds continued to improve, rising from 302 m.p.h. to 325, then 330 and then 332 m.p.h. The records established by Western and the proviously lished by Waghorn a short time previously had already been smashed! In the fifth there was a slight drop, but this was made up for in



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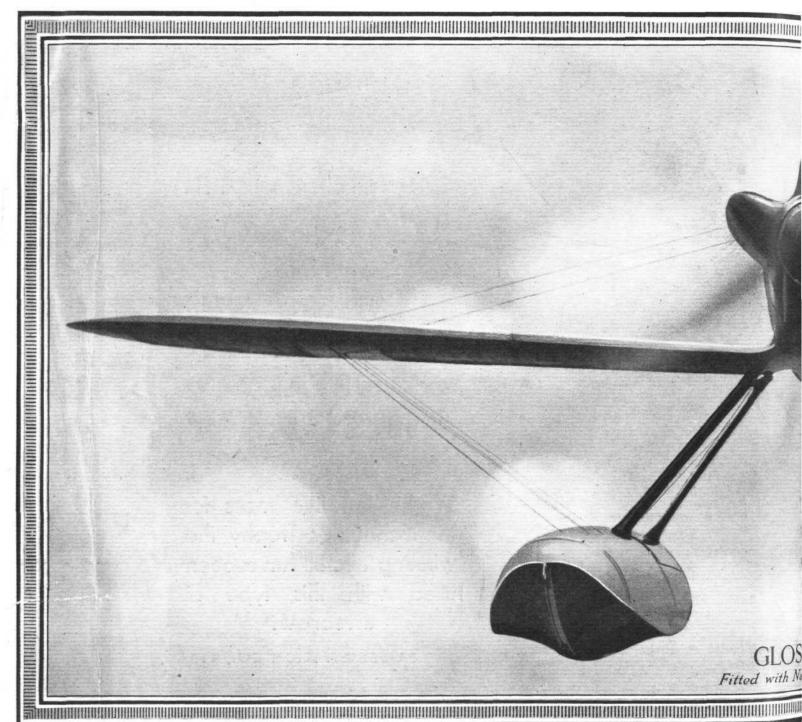
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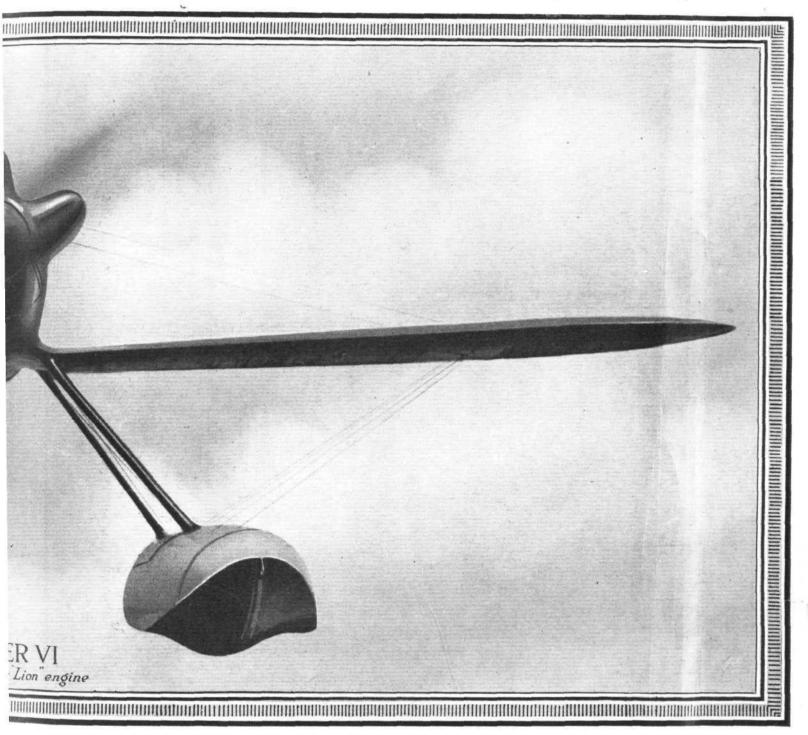
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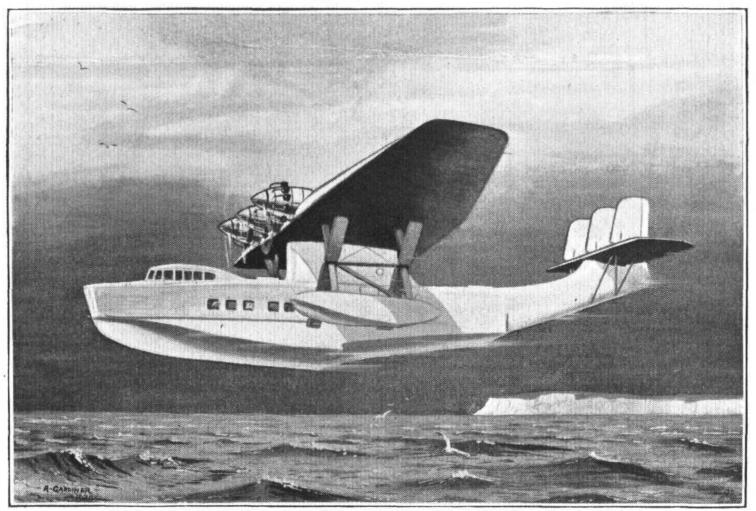
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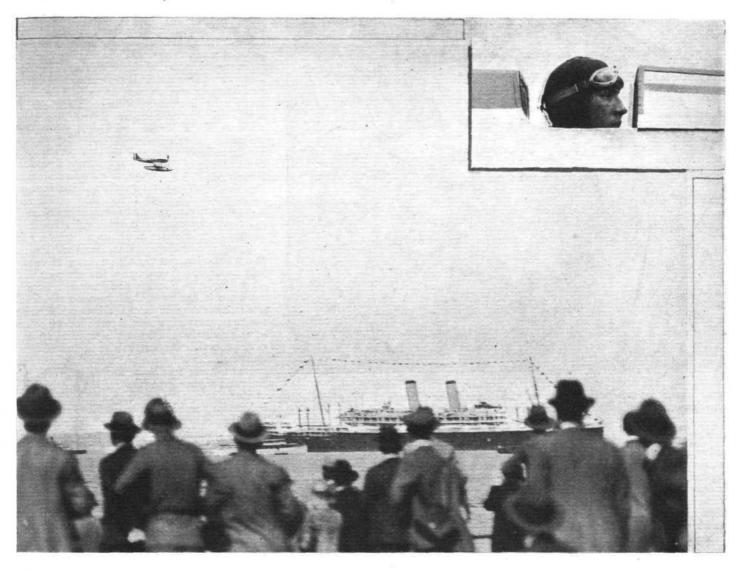
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THE FINISH OF A WORLD'S RECORD: Flying Officer Atcherley crossing the line at the end of his seventh lap, during which he established a world's record for speed over a closed circuit. His sixth and seventh laps constituted a world's record for 100 km. closed circuit. ("FLIGHT" Photos.)

the sixth and seventh, when speeds of 331 and 332 m.p.h. were recorded. Atcherley's average for the course was 325.54 m.p.h., and with his finish all three British machines had completed the whole course, a splendid testimony to British workmanship.

In the meantime the last Italian, Lieut. Monti on the second Macchi M.67 (No. 10) had taken off and crossed the starting line right over the pavilion. Along the Hampshire shore Monti was, apparently, flying only a few feet off the water, a daring piece of piloting which was duly appreciated, and which deserved to have been rewarded with success instead of failure. As Atcherley and Monti approached at the end of Monti's first lap both were seen to fly farther south than any previous competitor, both crossing the pier at Ryde well behind the pavilion. As Monti approached the Seaview turning point it was seen that instead of turning he carried straight on and alighted, rather suddenly but quite successfully. The last Italian was out of the contest. The most sincere sympathy for our Italian friends was felt by all along the course, the more so as it was later announced that Monti had had a burst water pipe and was rather badly scalded. His speed for the one and only lap he completed was 301 m.p.h., better than Cadringher's, but still a long way from being

as good as the speed of the S.6 machines, Nos. 2 and 8.

Just as everyone was feeling very happy at the idea that Great Britain had secured first and second places, it was announced that Atcherley had been disqualified for cutting inside the Seaview turning point. This put him out of the Schneider Contest, but he still retained the records for 50 km. and 100 km., which was some consolation. The final position then became: First, Waghorn on Supermarine S.6. with Rolls-Royce engine: second, Dal Molin (Italy) on Macchi M.52, with Fiat engine, and third, D'Arcy Greig on Supermarine S.5 with Napier "Lion" engine.

In the evening an informal banquet was held on board the Orford at which Sir Philip Sassoon presided, and at which members of the two Schneider teams were present, with the exception of Monti, whose scalds had necessitated his going into hospital at Calshot. After dinner Sir Philip Sassoon presented the Schneider Trophy to Waghorn, and short speeches were made by General Balbo, Squadron Leader Orlebar, Flying Officer Waghorn (who said his only anxiety was when he landed short of fuel near Cowes, thinking that he had failed to complete the course, whereas actually he covered nearly 8 laps!), Mr. Ramsay MacDonald, and Col. Bernasconi.

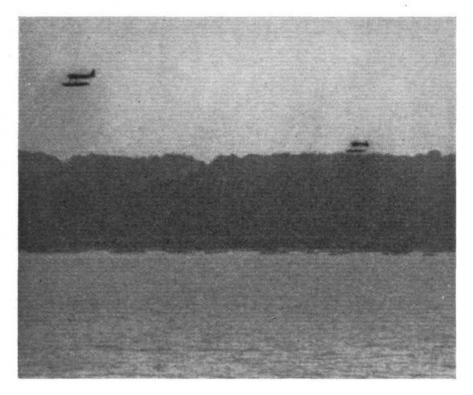
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ABOARD THE SS. "MONARCH"

E arrived at Southampton Docks on Saturday some time before the appointed time for embarkation on the S.S. Monarch, which had been specially chartered for the Supermarine Aviation Works Design Staff to see the Schneider Contest, but as there were already quite a few on board, we, also, took up a position forward. Alongside was the S.S. (Supermarine Staff) Grand Stand, carrying full load (of Staff and Et Ceteras), with steam tug in attendance. Shortly after she proceeded to take up her position near the course; her speed was not quite so fast as the S. 6.

At about 11 p.m. the Supermarine "Monarch"—late arrivals having been got aboard—cast off and commenced her taxying tests, with re-fuelling (the lunch was excellent). These proceeded without a hitch, and very pleasantly down Southampton Water and Spithead.

Calshot, as we passed, presented a scene of considerable activity, and when we saw Waghorn's Supermarine-Rolls Royce S 6 (No. 2) on the slipway with the R.-R. horses snorting eagerly to get away, we all naturally sent up cheer after cheer. Shortly after this we dropped into bottom



The most exciting moment in the Schneider Contest; Waghorn on the Supermarine S.6 (No. 2) overtaking Dai Molin on the Macchi M.52 (No. 4) ("FLIGHT" Photo.)

gear, at the request of a gentleman on a tug who waved his arms about at our pilot for a few minutes. Our observer reported that this was a semaphore signal to the effect that there was a pontoon of Italian Macchis proceeding ahead. Sure enough, we presently passed these (Nos. 7 and 10), and also the S.S. Grand Stand, which had, apparently, not yet lost overboard any of its load.

By this time weather conditions seemed ideal, the clouds had disappeared, and while visibility was fair, there was a good horizon, and there was a good ripple on the water. At about 12.30 we successfully passed our taxying tests (having arrived just off Osborne, I.O.W.), and then commenced our mooring-out tests. Our first attempt was not very successful, for we had no sooner dropped anchor than an excited motor launch appeared and informed us that we had taken up the wrong position. At least, that is what a Jack Tar was trying to indicate to us by semaphore, but only when he finished up his physical jerks with the expressive "thumb-over-shoulder" signal did we understand that we had to go nearer the course.

Eventually we anchored, inside the course, between Ryde and Cowes, some two miles from the Orford. We (collectively,

if not individually) had an excellent view all round the course, the Seaview, Southsea and Cowes turning points being clearly visible—especially the latter. While waiting for the start, we watched a Supermarine "Southampton" flying round the course, the Berengaria setting out on her Atlantic trip, and many other interesting things. Then, as the zero hour approached, we turned our eyes towards H.M.S. Medea, off Cowes, where the competitors were to start. At 2 p.m. we saw a puff of smoke, and simultaneously two little spurts of foam on the water, followed shortly after by the boom of the starting gun. The two white spurts of foam got nearer and nearer, then vanished—"he's off" we cried, and immediately the silhouette of the Supermarine-Rolls-Royce S.6 appeared above the skyline.

Some two minutes later, Waghorn on his No. 2 S.6 screamed (basso) past the Monarch and—watches out!—across the starting line off Ryde. The Contest had started. Before we knew it hardly he had rounded the eastern (Hayling) mark, and then we lost him in the haze, and multitudes of masts and funnels of the ships bunched together in that corner of the course. Presently he re-appeared over Southsea, and was soon streaking silently across Stokes Bay immediately opposite us, followed a long time after by the noise of his engine.

Waghorn made a splendid bank round the western (Cowes) mark, climbing comparatively little on his turn, and then came along past us once again

along past us once again.

We judged his time for the first lap to be 5 mins. 45 secs. or near the 324 m.p.h. mark, and on the whole this appeared to be very satisfactory. When Waghorn came round again we found he had improved his time by some 5 secs. which made his speed 329 m.p.h., while his third finished better still.

Then the starting gun boomed again, and presently up came Dal Molin on the Macchi-Fiat M.52 (No. 4), but his get-away was not so smart as Waghorn's and some minutes passed before he passed Ryde pier. Meanwhile Waghorn was half-way round the course and it did not seem long before he completed his fourth lap—this time we noticed he had dropped about 3 secs. Soon the Red Macchi, with its high-pitched scream well behind, was seen passing along the mainland with Waghorn a few miles behind.

The first—and only important—thrill of the day then occurred. Round came Dal Molin on the Red Macchi, completing his first lap, but as he passed the *Monarch* at 286 m.p.h. there was a blue flash past him—and Waghorn shot by and started well on his sixth lap before Dal Molin completed his first. Needless to say, cheers went up all round, for it suggested that a British victory was not unlikely. As it was, Waghorn had already beaten all records



FAST WATER TRANSPORT: Mr. Allingham, of the Hoyal Standard boat firm, earned the gratitude of many press representatives by taking them out close to the scene of the navigability trials. He is here seen taking a party of distinguished visitors from Calshot to Ryde. Among those on board were Mr. A. G. Reynolds (time-keeper), Mr. John J. Ide, of the American N.A.C.A., Mr. H. T. Vane of Napiers, and Capt. Wilkinson, the designer of the "Lion" engine. ("Flight" Photo.)

Flying Officer Waghorn USED

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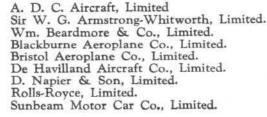
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with the 331 m.p.h. on his third lap, and the only unknown quantities now were the two Macchi 67's.

However, he continued lapping, although his sixth fell to 5 mins. 42 secs., the slowest he had done, but on his last he picked up to 5 mins. 38 secs.—Dal Molin starting his fourth lap nearly 2 mins. behind Waghorn as he "finished." When Waghorn crossed the line he continued on for another lap—as we thought, to make certain of matters; just before he reached the *Monarch* on this extra lap, however, he suddenly turned off the course and landed, much to our puzzlement, but why he behaved so is explained elsewhere in our report.

but why he behaved so is explained elsewhere in our report.

Meanwhile another boom from the Medea announced that No. 5, D'Arcy Greig on the Supermarine-Napier S.5 had started, so he and Dal Molin continued the duel together until they were joined by Cadringher on the Macchi-Isotta 67—when Dal Molin had completed six laps and D'Arcy Greig three. We all anxiously timed Cadringher's first lap, and were somewhat surprised to find he was only making 284 m.p.h.—only a little more than the S.5 (the latter's best so far being 283 m.p.h.).

During the end of his second lap, Cadringher suddenly

turned off the course, and passing directly over the *Monarch* turned towards Calshot, where he landed. About the same time Dal Molin had completed his seven laps and landed in the same locality.

For a short time, therefore, D'Arcy Greig had the course to himself, but just before he finished his last lap, Atcherley started on the second S.6, and he had nearly finished his third lap when the last competitor Monti, on the second Macchi 67, joined in.

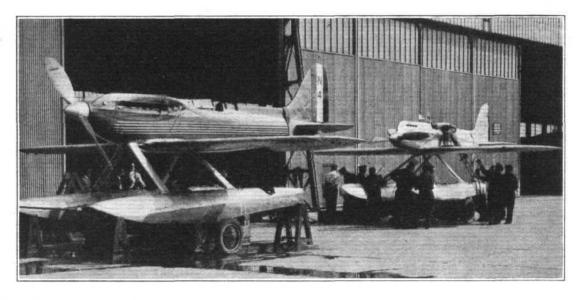
We were expecting Atcherley to be faster than Waghorn, and were surprised, therefore, when his first lap took 6 mins. 9 secs. (302 m.p.h.,) but subsequent laps improved on this. (Monti when he started zoomed up high and dived on to the starting line, but for all this he only completed his first lap in 6 min. 11 secs. (301 m.p.h.). We did not see him again after this first lap, and we heard later (per wireless) that he had been forced down off Hayling Island.

Thus, Atcherley was the only one now flying, with three laps to go, which he completed successfully, the last at 332.5 m.p.h.—the highest that day. It was announced over the wireless shortly after, however, that he had been



AS YET UNTRIED, BUT A PROMISING EXPERIMENT: The Savoia-Marchetti S.65 has its engines in tandem, with the pilot placed between them. It appears likely that this type may be developed into a very useful speed machine. ("Flight" Photos.)

The two successful types: In the foreground, the Supermarine-Rolls-Royce S.6 of 1929, and behind, the Supermarine - Napier S.5. ("FLIGHT" Photo.)



disqualified for not rounding the Seaview mark—and so Waghorn was an easy first, with Dal Molin second and D'Arcy Greig third.

So ended our viewing of the Schneider Contest—but not our adventures. After weighing anchor, we proceeded to the ss. Orford, and arriving alongside we gave vent to our feelings, with lusty cheering. Cheers for the winner, for the Supermarine S.6, for the Rolls-Royce engine, for the British team, for the Italians, and, when Mr. Mitchell, Mr. Royce, and a few others associated with the day's proceedings

appeared on the bridge of the Orford, we gave cheers for them.

Finally, this over, we steamed off and made a delightful cruise down the Solent to the Needles and then back to Southampton. After speeds in the neighbourhood of 330 m.p.h., our 8 m.p.h. or thereabouts over a millpond like glass in that beautiful September evening was extremely soothing, and we enjoyed it very much—although the editorial "We" was feeling just a trifle anxious about that last train from Southampton to Town!

S.6 No. 2 was perfect, and, in spite of the load of fuel, he

appeared to be very little longer on the water than in those

of some practice flights one had witnessed during the week;

once clear of the water the machine climbed steeply and

rapidly disappeared in the direction of Ryde, only to reappear

in an incredibly short space of time, having completed about three-quarters of the first lap. Stop watches clicked as he crossed the line of sight between the spectators and the mast

of the Calshot lightship, for there were, of course, no official

then on his second lap, leading, and as they raced along the straight towards Ryde the S.6 appeared to fairly devour

THE CONTEST AS SEEN FROM CALSHOT

CALSHOT was, for obvious reasons, not an officially recommended view point; the one route from Totton provided by the twelve miles of tortuous secondary road was not one of the "coloured" routes, nor were there expensive stands erected on the foreshore—it was free for all who could find their way to it. Also there was little parking space near the beach, so the owners of fields at or near Eaglehurst reaped a second and possibly more remunerative harvest. The narrow strip of beach left at high tide was, therefore, just comfortably crowded when the starting gun sounded.

One of the attractions of Calshot as a point of vantage was that it afforded an excellent view of the take-off of each machine, a sight in many ways more thrilling than that of the machines in the air. Furthermore, it gave a view of the cornering at the most acute-angled turn in the course, which could only be bettered, perhaps, by that obtained from West Cowes. Flying Officer Waghorn's take-off on Supermarine

broadcast arrangements at this point, and without some means of time checking it would have been impossible to follow the contest intelligibly. One had, however, dragged out the family wireless, complete with accessories, for it was never intended to be portable, for the express purpose of overcoming this little difficulty, not without some fear of domestic strife, and therefore proceeded to tune in to learn what that inseparable and indispensable pair of aviation broadcasters, Messrs. Ragg and Helmore, had to tell us, after watching the hectic cornering as the pylon marking the western end of the course was rounded. As the machine again appeared as a dot in the East, the stop watch holders prepared for action—"click" they went as the Lightship was passed, and away the little machine sped round the pylon and back again along the Isle of Wight coast. Gasps of delight and amazement escaped from the onlookers as the tables in the official programme showed the speed corresponding to the time taken was in the neighbourhood of 330 m.p.h., although the excitement was subsequently slightly damped when the news came through from Ryde that the first lap speed was actually 324 m.p.h. It was, however, soon seen from the official second lap speed that the unofficial timekeepers were not so far out, as the time they had taken was from about threequarters of the first lap to the same part of the second, and this proved to be in remarkably close agreement with the Waghorn continued to complete his circuits official figure. with a regularity which might have become monotonous but for the excellent cornering, and the proceedings were enlivened by the sparkling comments that emanated from Ryde. The S.6 appeared so absolutely steady and "set" that the skill and judgment displayed by that wonderful cornering was not and could not be appreciated to the full so consistent was Waghorn's flying that it all looked too easy! Furthermore, there was nothing to enable one to gather a real impression of the terrific speed at which he was travelling, apart from the "leaving his sound behind him" effect. This lack of a comparative standard was, however, to a certain extent remedied when Warrant-Officer Dal Molin joined the contest after a splendid take-off. The two machines rounded the pylon within a few seconds of each other, the Italian,

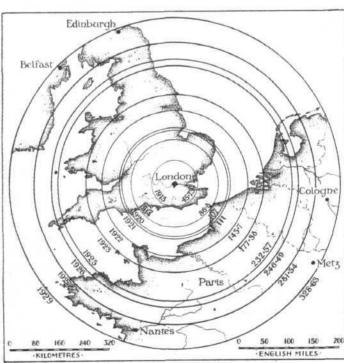
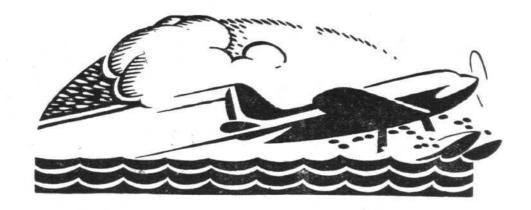


Diagram showing distances from London in one hour's flying of Schneider winners.



Britain wins again wins Schneider Schneider Trophy

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the Macchi as it tore past at a speed which appeared to be far in excess of the forty odd m.p.h. which eventually proved to be the difference between the averages for the course. The Italian flew much nearer the water, and had a peculiar style of cornering, as he began to "run uphill" some distance before reaching the corner, but did not appear to gain so much height actually during the turn as did the British pilot.

The entry of the veteran Supermarine S.5 and the news of the consistently "low" lap speeds of the Italian stimulated the interest which had begun to flag somewhat as Waghorn completed his circuits with monotonous precision. Flight-Lieut. D'Arcy Greig's take-off appeared the neatest, and he took the shortest run of any. The amazingly consistent lap times resulting from his perfect handling of this little machine excited much admiration and when, after finishing, he flew close to the crowd and landed in full view, they grew

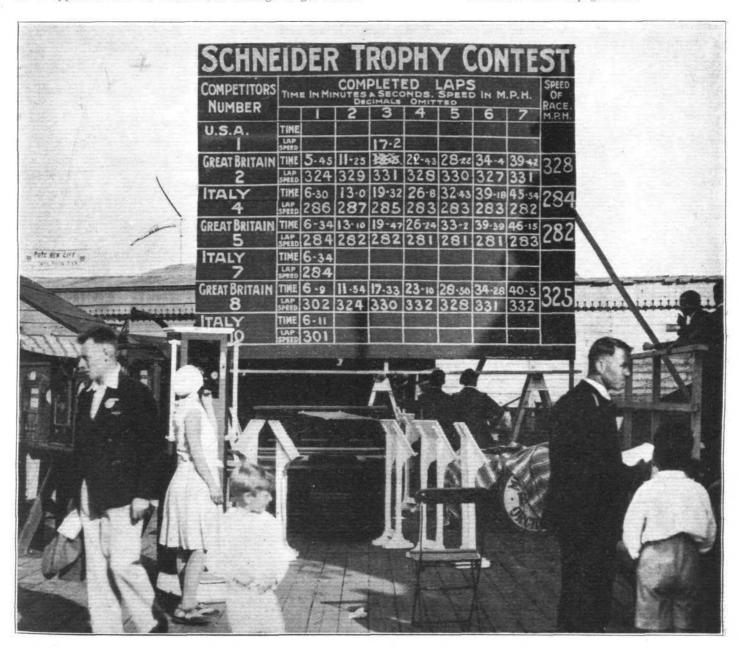
quite demonstrative-for Britishers !

Lieut. Cadringher's take-off was watched with great interest as the machine had had so little time in the air previously and as it was the pilot's second time only in her, but one would not have guessed that from his take-off. Once more the amateur time-keepers became alert, for great things were expected of this machine as it sped lower over the water than any previous competitors, but to the surprise of everyone the pilot apparently failed to pick up the Western mark boat in time to corner around the pylon but dashed past it and sailed up and round over the shipping in the Gurnard anchor as though he had mistaken one of the large steamships there for the turning point. Whether this was due to his being affected by the fumes from his engine or insufficient knowledge of the course is not known, probably the former, as he retired soon after through partial asphyxiation.

Flying Officer Atcherley's take-off was the most sensational, for it appeared as if he would never manage to get his S.6 "unstuck" from the surface of the water; each time as he seemed to be clearing, and the spectators were beginning to breathe again, the floats would again touch and thus retard the machine which looked as though it could not possibly withstand the vicious buffeting it received every time the floats hit the water as flying speed was reached. Once in the air however there appeared every promise of great things to come—what actually happened is related elsewhere. In his cornering at the western end of the course he most certainly made no mistakes and his "tight" turns were considered by many to be the most spectacular and effective of any. The news of his first lap at "only" 302 m.p.h. came as a great surprise, but the subsequent record laps rapidly made amends.

The last Italian machine to take the air, piloted by Lieut. Monti, did so with a normal run and was flown lower and with even greater daring than either of its team mates, and after a first lap almost as good as Atcherley's, things began to get interesting. It was therefore with much disappointment that we learned of his being forced down by a broken oil pipe—why do these things happen at the most exciting moments? With the last Italian out and Atcherley remaining to continue his "tour" unchallenged, there was little further excitement so far as we were concerned, but the crowd remained almost to a man until the news of the official results had come through. It was certainly the most enthusiastic crowd one had ever seen at such gatherings, a remarkable feature being the extraordinary keenness shown by the ladies. It was a man, the only one who was not satisfied probably, who was heard to exclaim "Is that their top speed?—hardly worth coming to see—I thought from the accounts in the papers they went so fast you couldn't see them." Perhaps he will stay at home during the next contest so that he may enjoy the sight of being unable to see them.

(Schneider items on page 1026.)



THE STORY OF THE SCHNEIDER CONTEST IN FIGURES: One of the Score Boards on Ryde Pier.

("FLIGHT" Photo.)

PILOTS AND OTHER SCHNEIDER PERSONALITIES



More impressions by our artist

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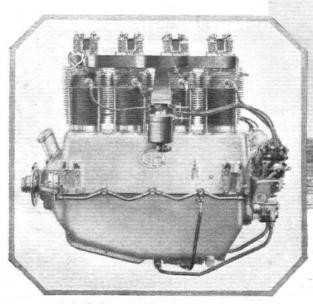
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A side elevation of the 100 h.p. Gipsy Light Aero Engine.

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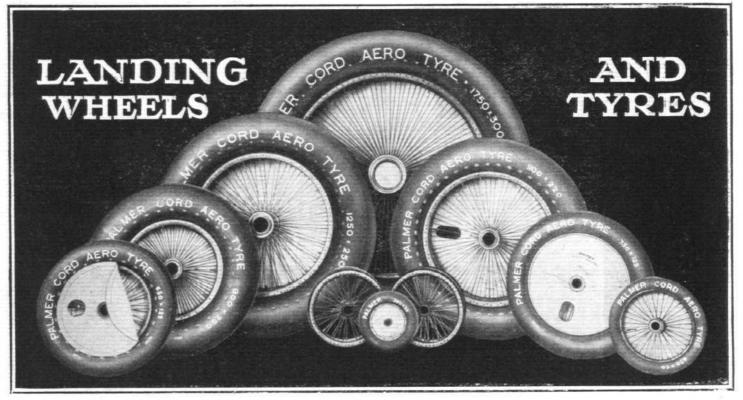
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Squadron-Leader Orlebar, who established a world's speed record of 355.8 m.p.h. on a Supermarine S.6 with Rolls-Royce racing engine. ("FLIGHT" Photo.)

WORLD'S SPEED RECORDS

Twice Beaten by Great Britain in One Day

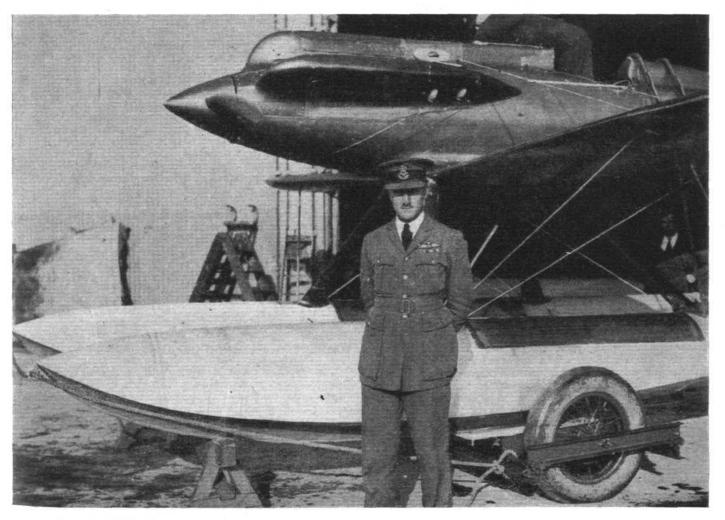
Having learnt our lesson at Venice in 1927, when we failed to go for the world's speed record over the 3-km. straight-line course and thereby gave our Italian friends an opportunity, which they were not slow to take, of establishing the record first, Great Britain did not make the same mistake again this year. As soon as the machines could be got ready, two attempts on the record were made on Tuesday of this week, September 10, both attempts being successful.

In spite of none too favourable weather conditions, Flight-Lieut. Stainforth made the first attempt, in the Gloster-Napier VI, the petrol system trouble of which had at last been overcome. Stainforth covered five laps of the 3-km. course over Southampton Water, the first being somewhat wide and therefore disregarded, and the other four, two in each direction, counting in the attempt.

The speeds established by Stainforth in the four runs were as follows:—First run, 351·3 m.p.h.; second run, 328·3 m.p.h.; third run, 336·2 m.p.h. and fourth run, 329·3 m.p.h. The average speed for the four runs was 336·3 m.p.h., thus beating de Bernardi's record by 17·7 m.p.h., and still this does not represent the best of which the Gloster-Napier VI is capable. The visibility was poor, and it was impossible to fly a good course.

When Stainforth had alighted, Sqdn.-Ldr. Orlebar, Captain of the 1929 British Schneider Team, took up the Supermarine-Rolls Royce S.6, on which Waghorn won the Schneider Contest last Saturday. The visibility was by then a little better, but still far from good.

Orlebar's speeds on the four runs, two in each direction, were as follows: First run, 368.8 m.p.h.; second run, 345.3 m.p.h.; third run, 365.5 m.p.h. and fourth run, 343.7 m.p.h. The average speed for the four runs was 355.8 m.p.h. Stainforth's record had been broken by 19.5 m.p.h., and de Bernardi's by 37.2 m.p.h.! Truly a magnificent performance. As in the case of Stainforth's record, it may be said of Orlebar's that, good as it is, he will doubtless be able to improve upon it.



Flight-Lieutenant Stainforth in front of the Gloster-Napier VI on which he established a world's speed record of 336.3 m.p.h. ("Flight" Photo.)



Transatlantic Airship Service

Dr. H. Eckener has outlined the plans which he has been discussing with the Goodyear Zeppelin Co. and a group of U.S. bankers for the formation of a regular transatlantic airship service. If the co-operation of German bankers can be obtained, it is proposed to build four new airships at a cost of £3,000,000. These will have a capacity of 5,100,000 cub. ft. and will use helium and fuel gas, accommodating 24 passengers, mail, and express cargo. Eight engines in pairs, back to back, in four gondolas, will form the power plant, and the cabins will all be within the envelope. In order to further increase the speed, it is said that the fineness ratio will be increased. It is hoped to have the scheme in operation by the spring of 1932.

And a Transatlantic Flying-Boat Service

During the past week some preliminary work has been done by the Luft Hansa in connection with the proposed transatlantic flying-boat service. Three of their pilots flew an Arado V-I (500 h.p. B.M.W. Hornet) to Seville from Berlin, with one stop at Marseilles, in 15 hours; the following evening they arrived back in about the same time. These "express" flights will be continued and, if possible, turned into regular services. The route across the Atlantic will be from Seville via the Canaries, Cape Verde Islands, and Fernando Noronha. From Berlin to Seville will be served by aeroplanes, and thence across the sea by the Rohrbach-Romar flying-boats. It is hoped that the first flying-boat stage to the Canaries or the Cape Verde Islands will be possible this year. Political unrest has delayed the loan which the Luft Hansa was to have for such extra services as these

New Attempt on the Long-Distance Record

It is reported that the Government has asked the Air Ministry to prepare for a further attempt on the long-distance record. The machine will be the same Fairey Napier which was used for the last attempt, and it is expected that the pilots will also be the same. The proposed route is from Cranwell to Cape Town, a distance of, roughly, 6,000 miles, which if accomplished would beat the existing record, held by Italy, by some 1,530 miles.

The Belgian Altitude Record Attempt

Two Belgian airmen, Lieuts. Lang and Croij, are said to have broken the Belgian height record on September 5; their altitude is variously reported from 24,360 ft. to 30,041 ft. No doubt we shall hear their real altitude when their flight has been homologated. The flight was made on a standard Belgian military machine with a "hotted-up" engine. Another Record Awaiting Homologation

M. FAUVEL claims to have created another record at Le Bourget last Friday, September 6. He flew his small machine, which weighs less than 400 lbs., to an altitude of 17,388 ft. at an average speed of 87 m.p.h., according to press reports.

Croydon Passenger Traffic Record

THE number of passengers carried last week between London and the Continent was 2,500, which is 500 more than the previous record. It is significant that 1,300 of these were carried by the Imperial Airways.

Solo Endurance Record Tragedy

MR. T. G. Reid, who was attempting to break the world's solo endurance record, was killed just after midnight on Saturday, August 31. He had already been aloft 39 hrs.-3 hrs. longer than the existing record—and was endeavouring to set up a 54-hr. record. He appears to have slept or lost

A Seaplane Flying Club for Hong Kong
The Far East Aviation Co. of Hong Kong inform us that they are forming a Seaplane Flying Club for Hong Kong, and have managed to obtain the ear of the Government, so that they expect to receive a subsidy and a capital grant. "These sums," say our informants, "should be available very shortly and, as soon as they are, we shall require a fully qualified 'B' licence pilot instructor to operate the club. His duties will consist of general organisation, training both in the air and on the ground. The successful applicant will receive a first class possesse to Hong Kong and a guarantee receive a first-class passage to Hong Kong and a guarantee of a return passage. The salary will be approximately \$9,000 per annum (about £900). Applicants must be single,

and they should have a wide experience of seaplane and flying-boat flying. We desire to make it perfectly clear that hard work is required. The club should start operation about Christmas this year, so it is necessary for us to get into communication with applicants as quickly as possible. When writing applicants should send as many particulars as possible to avoid our having to write asking questions.

A League of Young Airmen

BOURNEMOUTH - YOUNG AIRMEN'S LEAGUE, which was started about 18 months ago by Mr. W. Longman, a Bournemouth chauffeur, formerly in the Royal Air Force, has now a membership of about 40 lads, who are learning the rudiments of flight. They have built a model aeroplane for instructional purposes, and are securing a real machine from the Air Ministry for the same purpose, not for flight. Mr. Longman states that the object is not to teach boys to fly, but to create airmindedness and give them a grounding in the principles of flight. The boys have a uniform of grey flannels blue double-breasted coats, and peak caps, and the league is kept going by contributions of 3d. a week each from the members.

German-Polish Agreement

A GERMAN-POLISH air traffic agreement has been signed which closes a long-standing gap in European air communica-This will allow air services between the two countries, such as from Berlin to Warsaw, and will permit travelling over Polish territory by German aircraft, thus shortening existing routes and vice versa.

The Indian Air Mail Disaster

Full details are not yet to hand of the regrettable disaster to the air-liner City of Jerusalem which was destroyed at Jask on Friday, September 6. It appears that the machine caught fire on landing, and, together with the mails, was totally destroyed. Capt. A. E. Woodbridge, the pilot, Mr. V. G. Bell, a passenger, Mr. J. Court, the spare mechanic, were killed, and Mr. H. C. Amor, chief mechanic, and Mr. H. Bourne, wireless operator, were seriously

University of Paris Chair of Aviation

The University of Paris has decided to recognise the importance of aviation by creating a Chair of Aviation at the College of France, and the first professor will be Dr. Magnan, who is recognised as the authority on all matters appertaining to aircraft.

Sowing Seeds that Scatter

Reports from Bellingham, Washington, U.S.A., state that successful experiments have been carried out in sowing seed over some 160 acres by aeroplane. The type of seed

Aircraft in the Palestine Trouble

The latest official bulletin reports that the situation in

Palestine shows a great improvement and that the situation in Palestine shows a great improvement and that the aircraft carrier H.M.S. Courageous is being withdrawn; her place will be taken by aircraft from Egypt.

British Air Lines, Ltd.

Air-TAXIS at 10d. per mile per passenger during the day and 1s. 6d. at night are the charges to be made by British Air Lines, Ltd., who are starting at Croydon Aerodrome. They will use Armstrong-Siddeley Four machines, which are built on Fokker lines with three Lynx engines. Westland IV 3-Engined Cabin Monoplane for the Shell

Company A REPORT from Australia states that Flying Officer Owen, who experienced such bad luck in the Vellore, and Capt. Jones, formerly Deputy Controller of Civil Aviation, are coming to England to fly a Westland IV monoplane (3 Cirrus Hermes) back to Australia for the Shell Co. They will thus obtain first-hand information concerning the England-Australia for the Shell Co. The Shell Co. state that the Westland IV tralia air route. will assist them in their Commonwealth-wide organisation.

Aero Hire, Ltd. AERO HIRE, LTD., are benefiting by the growing airmindedness of the Midlands. Last week, besides joy-riding and instruction, they had trips to :—Blackpool with racing staff for the Amateur T.T. race, Heston for photography, Cowes with a spectator for the Schneider Trophy Race, London with press photographs of the race, and nnally back



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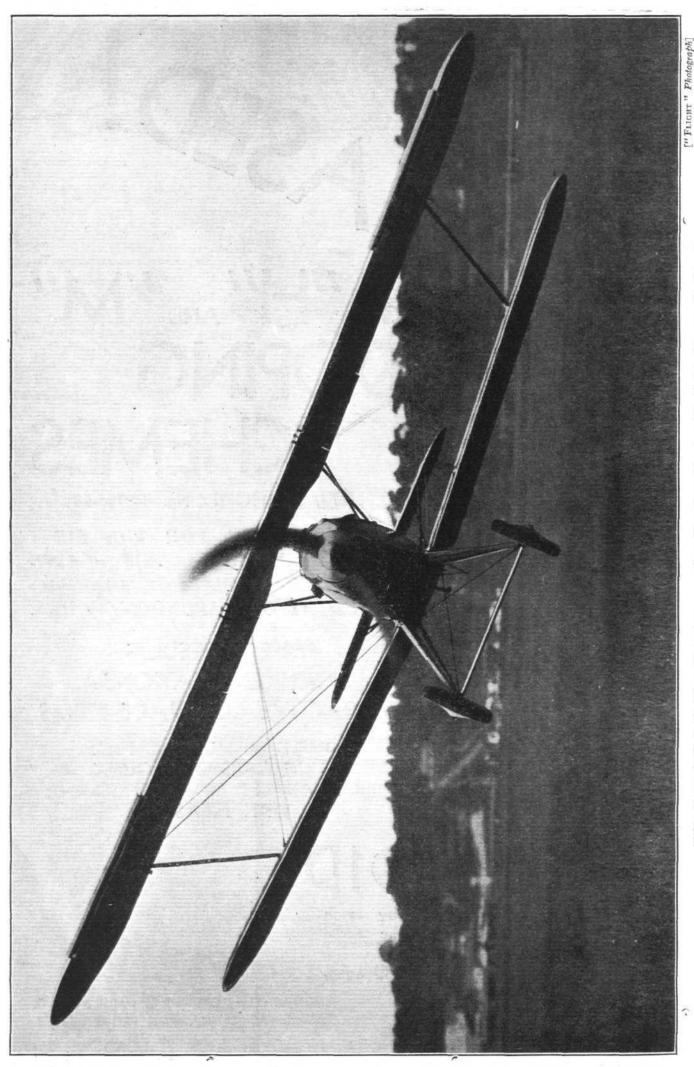
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An Indian trapper.

By E. L. CHICANOT

ANADA'S first economic activity was the fur trade and it is still a basis industry of outstanding importance and value, with a raw pack valued at about \$20,000,000 annually. It has long been outstripped, however, by subsequently developed industries, which have staged a much more rapid progress. To a large extent this is explained by the fact that the peculiar conditions surrounding the fur trade in its primary phases have remained unchanged and unaffected down through the years since when men first set out to exploit the country's rich peltry. While other sections of the country have steadily advanced with the aid of the ever-expanding fund of human knowledge, the great hinterland which is the source of the Canadian fur pack has virtually stood still, the northward penetration of other economic activity merely causing its industry to retreat before it to retain its primitiveness.

Today, the men primarily responsible for the production of Canada's wild furs are living much after the same fashion as did the first adventurers the lure for peltry took away from civilization into the different wild sections of the country. For the main part their lives are still as solitary and laborious, and few changes have taken place down the years in the manner in which they follow their trap lines. They still get their packs down to the edge of civilization in the same primitive manner, paddling down rivers and toiling over portages in the spring and mushing on snowshoes behind loaded sleds in the winter. The posts at which these furs

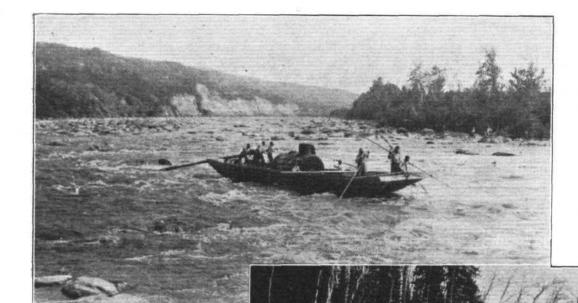
are collected are little changed since the Hudson's Bay Company established them ages ago, and they have continued to function in exactly the same way, oblivious to the progress going on all about them, as definitely cut off from civilization save for the uncertain visits of river boat and dog team.

During all the years while Canada has been staging a quite remarkable development in many respects the staple industry of the north has stood still, because its security appeared to depend so entirely upon the retention of its primitive state and it seemed that no modernization could be introduced without adversely affecting it. Now, quite suddenly, the fur industry of the north seems likely to be brought completely up to date without having to pass through the various stages of development other of the Dominion's economic activities have had to, leaping at a bound over all the intervening years.

Even after the era of the aeroplane in Canada opened up, one industry after another being affected in some manner, the conditions under which furs are procured seemed so inevitable that it never occurred to associate the machine of the air with the fur trade, the oldest of the country's activities. When, however, the 'plane, principally in its enlistment to aid the mining industry, set about the wholesale conquest of the northland, it was unavoidable that sooner or later it would come to play some part in the fundamental industry of that country. It has been one of the last to be affected, but indications are that from now on the machine of the air will gradually effect a good deal of a revolution in



'Plane operating for fur trading port. This Fokker made the first Western Canada Airway Air-mail flight, Fort McMurray to Fort Simpson, January 23, 1929.



Winter time transport in Far North. Hudson's Bay—Shooting the rapids.

Old and new methods of transport in Far North.

the fur trade as it has other phases of activity beyond civilization's frontiers.

The northland is proving to be, in all essentials, peculiarly the realm of the aeroplane, where it can realise the utmost in its possibilities of service. It can be made a factor of more revolutionary effect in the fur trade than in probably any other industry. Its utilization is of a two-fold character, for purposes of transportation and survey. Nowhere does the 'plane work such magic in the way of covering long distances as in the far north, where it competes with the most primitive methods of travel. This can be applied to the fur trade as it has to other frontier industries.

The 'plane has been proved unrivalled for survey of any kind in Northern Canada, and its utilization for this purpose extended rapidly. Pilots operating 'planes for various purposes beyond the fringe of civilization have been able, without any special effort, to make fairly accurate surveys of the wild life resources of certain territories and have frequently been instrumental in putting hunting parties in touch with good sport. There is no reason why this cannot be applied with equal effectiveness to scouting out new trapping territories.

tory It must not be imagined that because the methods of the trade have stood still that trappers and fur traders have not themselves been moving with the times. The conception themselves been moving with the times. of the northern trapper as an ignorant toiler undergoing great rigours for a mere pittance to keep body and soul together is a picture which needs correcting. He is as alert to all the features of his business as men of other occupations. The good prices which have prevailed for furs have put many of them in an extremely comfortable position, and westerners know the royal manner in which many of these solitary, hard-living men celebrate on their occasional visits to civiliza-With fur markets multiplying on the American continent and competition becoming more acute, the business of the trader is becoming an ever-keener one. All individuals concerned have been alert to modern trends but in the past there has been no possibility of applying these to their peculiar activities. They have, however, been quick to take advantage of them when opportunity offered as occurrences in the past winter particularly have shown.

It has been well illustrated in the Yukon, which, for most people, is the farthest and most inaccessible north. Time was when the ultimate in comfortable transportation the Yukon trapper looked for or expected was a fur-lined sled drawn by a sturdy team of huskies or malamutes. Then many trappers, both whites and Indians, on their periodical visits to town tasted the joys and thrills of motoring and some of them acquired cars. Later, the aeroplane was introduced into the Yukon to operate a mail and general transportation service, and trappers visioned something yet more thrilling and rapid in the way of distance covering. Not infrequently now, this 'plane is employed to take trappers from civilization's fringe to the location of their trap lines. Journeys that formerly took them four or five days, toiling on snowshoes behind dog teams, they now accomplish in an hour or two. They find this mode of travel economical as well as comfortable by reason of the extra days' trapping they are able to put in and the saving in food for the dogs.

A commencement has already been made in Northern Alberta in making use of the aeroplane to scout out new territory for trapping operations. A couple of enterprising trappers desirous of finding a new suitable location for their trap lines hired a 'plane available in the country and made an exhaustive survey from the air with most satisfactory results. In a very short space of time they had covered in much more effective manner an expanse it would by the ordinary means employed, have taken them weeks and perhaps months to get over. There would seem to be every probability that with the aeroplane entering ever more generally and extensively into the life of the northland it will be used to an increasing extent for this purpose. The time can be anticipated when the larger trading companies, whose profits depend upon the success of the operations of the individual trappers will make use of aeroplanes to aid them in this manner.

make use of aeroplanes to aid them in this manner.

Effective use can also be made of the 'plane for the purpose of inspecting trap lines and gathering in the furs where operations are carried on on a large enough scale. This was done in the past winter in a section of Northern Quebec. A trapper with several men working for him hired two 'planes to travel from point to point collecting the pelts and bringing them in a central station where they could conveniently be shipped to markets. The results were astonishing. Where formerly several men with dog teams were employed at the task which occupied them many weeks only five days were taken by a single man accompanying the pilot of the 'plane.

The 'plane can also be utilized to get the fur pack to its ultimate destination, the gain in time so effected being in many cases substantial and the many advantages justifying this means of transportation. This was done for the first

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Flying Officer H.R.D. WAGHORN.



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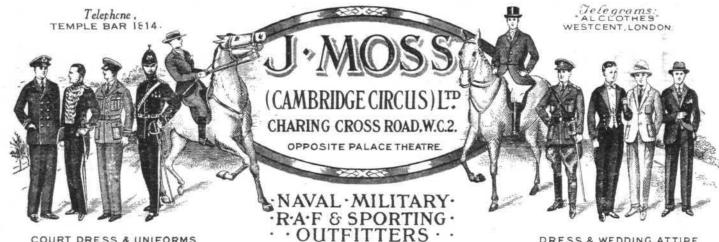
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328.63 m.p.h.

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VICOMTESSE DE SIBOUR, during her world tour in a slotted "Moth."

> " Daily News." 27th June, 1929

HANDLEY PAGE, LTD. CRICKLEWOOD, LONDON, N.W.2.



Hudson Bay Post.

time, as far as is known, by a trader who had been buying furs in Northern Manitoba and wished to beat his competitors to the Winnipeg market. Coming out of the great northland by dog team he reached Cranberry Portage, which is a base for the Western Canada Airways in the service to the northern mining industry. He hired a 'plane there, put his pack on board, and was in Winnipeg quite a month ahead of his competitors, who continued to toil over the trail behind their dog teams until reaching the most northerly point of railway contact. This is merely an indication of what may be expected to happen in the future.

Such catering to the fur trade was carried very much further recently, when the Western Canada Airways established regular services between the Waterways, 250 miles north of Edmonton, and the most northerly point of railway contact Alberta, and the fur trading posts of Chipewyan, Smith, Resolution, Hay River, Providence and Simpson. Two trips a week are being made from Waterways to Fort Resolution on Great Slave Lake, 512 miles away, and return all in one day's flight. Two trips per week are likewise being made to Fort Simpson, half-way point between Waterways and the Arctic and the connecting post for the Liard River traffic, flying north one day and returning the next, with calls at the intermediate posts of Chipewyan, Smith, Hay and Providence.

It is difficult to imagine a greater conquest to the credit of the machine anywhere than this bridging of the primitive with civilisation. These posts are today very much what they were when the Hudson's Bay Company established them, collecting points for the furs from the great trapping territories about them, centres to which trappers come in for their simple supplies. Last year their only contact with civilisation was when the at all times uncertain river boat reached them in the summertime and the mail carrier reached them with his dog team in the winter. Today, at a bound they have been placed on a par with the most advanced sections of the country as regards the most modern form of transportation.

The foregoing gives some rough indication of the manner in which the 'plane is coming to enter into Canada's oldest industry, revolutionising methods that have remained analtered since the earliest days of the country's development. Its efficiency and value at all stages from the scouting out of new territory and the visiting of trap lines to the collection of pelts and transportation to markets has been sufficiently proved to suggest that the machine of the air will become an ever more effective factor in modernising the fur trade as it is in other industries carried on beyond the frontiers of civilisation.

It may be apprehended that with the raw fur pack already tending to diminish, the 'plane may prove so efficient an aid as to become an extremely destructive agent. Any such tendency should be effectively offset by the wider scope of operations permitted, and the bringing of much new territory within the range of profitable trapping. At the same time the 'plane might be made very helpful to the authorities in

conducting surveys to ensure perpetuity of fur resources as well as in the vast work undertaken in the northland of preserving wild life and building up great meat herds.

For instance, the Dominion government is evidently determined to develop a great reindeer industry on the northern tundras, for which the most thorough investigation has been put under way. The 'plane has already been used most successfully in the work of herding reindeer in Alaska, a single herdsman with a pilot accomplishing in a few hours as much as several men on the ground could do in twice as many days. There is no doubt the machine of the air will be put to the same use in Alberta. It is also planned to use the 'plane in studying the annual migration of the cariboo, a matter of great importance since the natives are largely dependent upon this animal for food. At present, word of the path the migration is taking is carried to the various tribes by runners who have been stationed at various posts. The ability of the 'plane to carry out this work more effectively needs no demonstration. Similarly, no agency could so efficiently carry out the work of surveying the progress being made in the buffalo and muskoxen sanctuaries in the far north, where great meast preserves are being built up by the Dominion.

meat preserves are being built up by the Dominion.

The industry which is looked to to definitely offset any danger of diminution in the Canadian fur pack is fur farming, which is an expanding industry in all provinces. Some of the enterprises launched for the domestic rearing of fur-bearers are on a very elaborate scale, and more large ranches promise



Pilots of Western Canada Airways.

to come into existence as muskrat ranching gets under way in Western Canada. Already, in one instance at least, the 'plane is being used in connection with one such establishment The director is able for purposes of transport and survey. to fly from his city home to the ranch beyond civilisation's fringe, and can at any time rapidly and conveniently make a survey of the enormous property and its wild life. As the tendency in the future will in all probability be to locate such large ranches farther north, the use of the 'plane in their operation can be expected to steadily extend.

In its ruthless advance the aeroplane has penetrated the northland and revolutionised all phases of frontier life. Canada's first industry is among the last to be affected, but it is inevitable it should be as drastically changed as others. Already the machine winging its way overhead on various missions has become familiar to the solitary trapper on his round, and it is a mere step to practical utilization. The past winter saw the first steps in that direction, and the future will doubtless experience a steadily increasing modernisation of a trade which has stood still for centuries.

0 **MINISTRY NOTICES** AIR

NOTICES TO AIRMEN

Mis-Use of Wing Flaps

It is notified:—

1. Aircraft fitted with wing flaps which are adjustable in flight by the pilot, must on no account be allowed to dive with the flaps down. Mis-use of wing flaps in this way induces forces which aircraft structures are not designed

ops in this way induces forces which aircraft structures are not designed o withstand.

2. The only occasions on which flaps may legitimately be operated are:

When taking off. (b) On climb. (c) When landing. At all other times tey should be in the neutral position.

(No. 48 of 1929).

Croydon Aerodrome. New Compass Swinging Base
1. A NEW and improved form of Compass Swinging Base situated in the
S.E. corner of the Croydon aerodrome, approximately 165 yards to the
S. of "B" shed, is now available for use at the rates shown in paragraph V

below.

II. Application for use.—Owners or persons in charge of aircraft wishing to use the base should notify the Chief Aerodrome Officer accordingly. The Chief Aerodrome Officer will then detail a traffic hand to superintend the use of the base.

III. Description.—The compass base comprises a rotating turntable or control platform capable of being locked on the eight principal points of

of the base.

III. Description.—The compass base comprises a rotating turntable or central platform, capable of being locked on the eight principal points of the compass by means of brass tongues recessed into the table. These tongues are marked, respectively, in an anti-clockwise direction, N., N.E., E., S.E., S., S.W., W., and N.W.

The insertion of the tongue marked N, into the fixed locking block in the concrete surround, ensures the fore and aft line of table being in the magnetic meridian. Rotation of the table in a clockwise direction will then bring the remaining tongues opposite the locking block in the order given above.

The fore and aft line of the table is indicated by one aluminium strip and four parallel lines of gun-metal studs, and the athwart-ship line by one line of gun-metal studs.

A tail-lifting jack is incorporated in the table to raise aircraft into the flying position.

position.

Eight locking cams are provided beneath the platform to prevent injury to the bearing surfaces while aircraft are being manœuvred on to or away from the base.

Instructions for use.

IV. Instructions for use.—

1. Unlock the cams to free table, rotate the turntable until the S. point marked with an arrow head is opposite the arrow head on the concrete.

2. Lock the CAMS.

3. Bring the aircraft on to the base, so that its longitudinal axis is exactly parallel to the fore and aft aluminium strips, and so that the C.G. of the aircraft is, as far as practicable, over the centre of the platform.

4. Raise the aircraft into flying position, using the tail lifting jack if it is a heavy aircraft. A suitable wooden trestle may, however, be used in the case of light aircraft.

5. Unlock the cams.

6. Rotate the table as desired.

7. On completion of the compensation of the compass, rotate the table so that the S. point is opposite the tail of the arrow on the concrete.

8. Lock the CAMS.

9. Taxy the aircraft away from the base.

V. Table of Charges.—Aircraft of weight (empty) not exceeding 3,000 lbs., 5s.; not exceeding 5,000 lbs., 10s.; not exceeding 10,000 lbs., 15s.; over 10,000 lbs., fl. 10,000 lbs., £1. (No. 49 of 1929).

Manchester (Wythenshawe) Aerodrome: Approval as Customs Aerodrome

1. MANCHESTER (Wythenshawe) aerodrome is, with the concurrence of the Commissioners of Customs and Excise, approved as a Customs Aerodrome under paragraph 2 of Schedule VIII to the Air Navigation (Consolidation) Order, 1923.

order, 1923.

2. The necessary Directions under the above-mentioned Order will be published in due course as the Air Navigation Directions, 1929 (A.N.D. 4G).

3. The approval is given only until February 28, 1930, and may be withdrawn at an earlier date by further Directions.

(No. 50 of 1929.)

(No. 50 of 1929.)

Use of Tri-Coloured Navigation Lights on Aircraft

1. The rules as to lights to be carried on "flying machines," given in the Air Navigation (Consolidation) Order, 1923, Schedule IV, Section I, paragraph 2 (a), as amended by the Act Navigation (Amendment) (No. 3) Order, 1928, are regarded as being complied with if the following modified lights are employed on "flying machines" of less than 60 feet wing span:

Two tri-coloured lights, one mounted above the centre-section of the aircraft and the other below the fuselage, instead of the usual side and tail navigation lights.

The lamps should be so constructed as to show a green light on the right side, a red light on the left side and a white light astern, through the angles laid down in the Air Navigation (Consolidation) Order 1923, Schedule IV, Section I, paragraph 2 (a) as amended by the Air Navigation (Amendment) (No. 3) Order, 1928. The range of the lights should be as specified in the Order.

2. "Flying machines" with a wing span of 60 feet or more, must carry the usual separate navigation lights.

(No. 51 1929.)

Flights Across the Channel: Arrangements for Reporting and

Flights Across the Channel: Arrangements for Reporting and Search

Search
1. Pilots of aircraft which are not equipped with W/T, who desire to take advantage of the arrangements for signalling their passage across the English Channel, as described in Notice to Airmen No. 38 of 1928, should note the procedure outlined below.
2. An aircraft which has effected a circuit around Lympne aerodrome indicating departure for the Continent, but which is obliged, owing to weather or other cause, to abandon the attempt to cross the Channel, must return to

Lympne and circuit the aerodrome a second time, such circuit being continued until the signal of acknowledgment (defined in Notice to Airmen No. 6 of 1929) is given. This second circuit will have the effect of cancelling the first circuit.

3. In the event of it being decided to abandon the Channel crossing, it is

3. In the event of it being decided to abandon the Channel crossing, it is of the utmost importance that this second circuit be made by an aircraft which has previously signalled its departure for the Continent. Otherwise, the aircraft may subsequently be reported missing, and an unnecessary search made.

4. At present, this "cancellation" procedure is only to be employed at Lympne aerodrome. Arrangements may be made later for its adoption at the Continental reporting points.

5. The search and rescue service, described in Section 2 of Notice to Airmen No. 38 of 1928, has been augmented, a flying-boat owned by the Compagnie Aérienne Francaise being available for patrol duty from Calais. (No. 52 of 1929.)

Civil Air Mans of Great Britain

Civil Air Maps of Great Britain

It is hereby notified—

1. Further to Notice to Airmen, No. 23 of 1929, certain additional sheets of the civil air maps of Great Britain have now been placed on sale.

2. The numbers of the sheets and the approximate areas covered are given below:—

The numbers of the sheets and the approximate areas covered are ven below:—

 (i) The Ordnance Survey Ten Mile Map of Great Britain (Special Air Edition).—
 Sheet 1.—That portion of Scotland lying N. of latitude 55° 40′ N.
 (ii) The ½-in. Ordnance Survey Map of England and Wales (Civil Air Edition).—
 Sheet 5.—That portion of England and Wales lying between Latitudes 52° 34′ N. and 53° 36′ N., and between Longitudes 0° 45′ W. and 3° 21′ W.
 Sheet 6.—That portion of England lying between Latitudes 52° 32′ N. and 53° 36′ N. and F. of Longitudes 0° 45′ W.

32 21 W.

Sheet 6.—That portion of England lying between Latitudes 52° 32′ N.
and 53° 36′ N., and E. of Longitude 0° 45′ W.

Sheet 8.—That portion of England and Wales lying between Latitudes
51° 32′ N. and 52° 34′ N., and between Longitudes 0° 48′ W. and
3° 20′ W.

Sheet 9.—That portion of England lying between Latitudes 51° 30′ N.
and 52° 32′ N., and E. of Longitude 0° 48′ W.
Sheet 11.—That portion of England and Wales lying S. of Latitude
51° 32′ N., and between Longitudes 0° 50′ W. and 3° 19′ W.
3. Copies of these maps may be obtained from Flight, 36, Great Queen treet, W.C.2. Post free: Sheet 1, 5s. 3d. (mounted 6s. 4d.); Sheets 5, 6,
9, 11, each 2s. 8d., mounted 3s. 9d.
(No. 53 of 1929.) Street, W.C.2. Pos 8, 9, 11, each 2s. (No. 53 of 1929.)

NOTICES TO GROUND ENGINEERS

D.H.50 and D.H.50A Aircraft: "Puma" Engine Petrol System

(1) The modifications described herein must be satisfactorily incorporated in all existing D.H.50 and D.H.50A aircraft with "Puma" engines before any such aircraft is submitted for inspection for renewal of the Certificate of Airworthiness.

(2) The modifications consist of altering the present position of the petrol filter to a position above the level of the carburettors. A "Y" piece is

(2) The modifications consist of aftering the present position of the period filter to a position above the level of the carburettors. A "Y" piece is fitted on the filter outlet, and separate branches are led from this "Y" piece to elbow connections on the bottom of the carburettors. A 1-in. vent pipe is led from the highest point of the filter to above the top level of the

fuel tank.

(3) These modifications are introduced to overcome the likelihood of fuel starvation due to air locks, which are probably caused by the heat of the exhaust pipe vaporising the petrol in the lead from the tank to the filter.

(4) The modifications are shown on D.T.D. Drg. No. 16/1098, copies of which can be obtained on application to the Drawings Library, Air Ministry, Kingsway, W.C.2, on prepayment.

(5) No Certificate of Airworthiness will be issued or renewed in respect of any D.H. 50 and D.H.50A aircraft with "Puma" engines unless the abovementioned modifications have been satisfactorily incorporated.

(No. 15 of 1929.) fuel tank.

(No. 15 of 1929.)

Magnetos: Suitability for Use with Screening Equipment and Metal Braided H.T. Ignition Cables

(1) Certain types of magnetos fitted on aero engines have been approved, and are suitable for use only with plain rubber H.T. ignition cables. The fitting of metal distributor screens and metal braided H.T. ignition cables thereto, for the purpose of overcoming interference where wireless is installed in an aircraft, may seriously affect their correct functioning owing to the increased load imposed due to capacity effect, and result in engine failure or defective running.

defective running.

(2) The attention of ground engineers is, therefore, directed to the necessity of ensuring that metal distributor screens and metal braided H.T. ignition cables are not fitted to any magneto unless it is of a type which has been type-tested and approved for use under these conditions on the particular

type of engine in question.

(3) The following is a list of the types of magnetos which have been type-tested and approved for use with metal screens and metal braided H.T. ignition cables and is appended for guidance. Additions will be made as and when necessary. when necessary.

Heccessary.

Agro Engine Magnetos

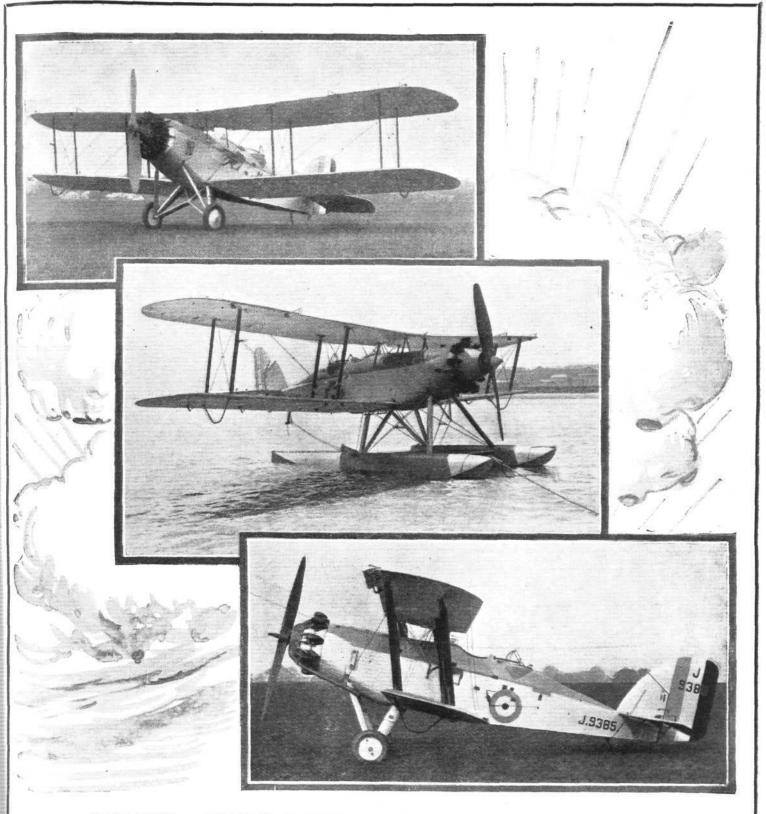
B.T.H. Types.—A.V. 14, S.V.14A, A.V.12D, A.V.12E, A.V.12F, S.V.12A, S.V.12F, S.V.9, S.C.14-1, S.C.12-7A, S.C.12-7B, A.C. 12-1, A.C.12-10. S.C.9-1, S.C.9-1A, S.C.9-1B, S.C.7-1, S.G.5-1, Watford Types.—C.6.S.M. S.T.5-1, S.P.9-1.

Hand Starter Magnetos

B.T.H. Types.—S.S.-1. A.S.-1.

(4) The following have received "limited" approval only. These are early type hand starter magnetos, and are only capable of dealing with the capacity effect of a very short length of metal-braided cable:—C.A.V. type. CAV. (modified). Lucas (Thompson-Bennett) type. A.M.S. (modified).

(No. 16 of 1929.)



WESTLAND THE WAPITI

TOP-The Westland Wapiti with Jaguar Engine and Split Axle Undercarriage,

CENTRE-The Westland Wapiti Seaplane with Jupiter VIII Engine.

BOTTOM-The Westland Wapiti with Jupiter VIII Engine with Exhaust Ring (as supplied to the R.A.F.).

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SOME CLUB **FIXTURES**

URING the next few weeks several flying meetings, "At Homes," etc., have been arranged by certain of the Light Aeroplane Clubs. These events, more or less winding up an extremely lively "season" in the flying world, are, with one exception—the Newcastle Air Pageant—
"private" affairs of the Club concerned. We give below
just a few brief notes regarding these events, hoping they may be of interest to readers of this Section of FLIGHT-either from the actual participation or merely "looker-on" point of view.

The Newcastle Air Pageant and Grosvenor Cup Race

THE race for the Grosvenor Cup will be held at Cramlington Aerodrome on October 5. The organisation is in the hands of the Newcastle Aero Club, and the meeting will have the full support of the R.A.F. Other races will include those for the Air League Trophy and the Society of British Aircraft

Constructors' Trophy.

It should be particularly noted that the closing date for entry forms for the races has been extended from September 14 to September 21-anyone who has not yet received entry forms can obtain them from the Hon. Secretary, J. H. Bell, Cramlington Aerodrome, Northumberland. Next week we hope to publish further particulars of this meeting.

Lancashire Aero Club " At Home '

THE Lancashire Aero Club is holding its first "At Home"

on the Avro Aerodrome, Woodford, on Saturday, Sept. 14.

The Party will commence at 2 p.m. and will continue, weather permitting, throughout the afternoon and evening. There will be a number of informal flying competitions open to visiting pilots, including Aerial Golf, Balloon Bursting, and a novel Aerial Treasure Hunt. There will also be a duration contest for model aeroplanes, open to all comers. (Any type of model aeroplane may be entered, but re-fuelling in the air is barred!)

Tea will be served in the club house during the afternoon. At the conclusion of the flying events, supper will be served, followed by a dance in the club house verandah.

A cordial invitation is issued to all who possess (or can beg borrow or steal) an aeroplane to come over to Woodford on

that date and join the party.

There will be no public flying display, but something will be going on all the time, and aerial visitors can enter for any events. The supper and dance at the club house in the evening will be of an informal nature and evening dress will not be worn. They will be glad, however, if those who are staying for the evening, and have not made any special arrangements,

will let the secretary know in advance so that accommodation for the night may be arranged.

Leicestershire Aero Club's Flying Meeting

THE Leicestershire Aero Club has decided to hold its first flying meeting on Saturday, September 14. It was much against the desire of the committee to bring the date so far forward, but, owing to circumstances over which they had no control, they had the option of fixing this date or giving

up the meeting entirely until next year.

The Leicestershire Aero Club have just received the licence for their aerodrome at Desford, which is situated 7 miles E.S.E. of Leicester. At present the use of the

ground is limited to light aeroplanes and Avros.

They have erected a club-house, which is divided into three

A telephone has been installed.

At present the hangar accommodation is limited to a shed containing their Gypsy Moth G-AAIF with wings folded. It is intended to put up two full-size hangars shortly.

A 1,000-gallon petrol tank with 5-gallon pump has been installed on the ground and they are arranging to hold supplies of the various brands of oil in addition to their own bulk storage of Castrol XXL.

The Last Meeting at Filton as a Civil Aerodrome The Bristol and Wessex Aeroplane Club will be holding a "Farewell" Aerial Garden Party at Filton on Sunday, September 22, to celebrate their successful tenure there, before leaving during the coming winter to take over the new municipal aerodrome on the south side of the town.

Filton is now a service station, and it is hoped that many of those who have previously visited the Bristol Club will come and pay their respects. All visitors will be heartily welcomed.

There will be a Bombing competition, and various demonstrations, all entries to be made on the aerodrome. Autogiro has promised to perform and Mr. H. S. Broad will

also kindly be given a show.

The Bristol Club hope that as many visitors as possible will arrive for lunch and be their guests.

A Meeting at Sywell

The Northamptonshire Aero Club are holding a Weekend Meeting at Sywell on Saturday, September 28, commencing at 2.30 p.m., and cordially invite all private owners and members of other clubs. There will be a novelty competition which is being organised by Capt. Broad for professional pilots and another competition for private owners, details of which will be circulated on application to the Secretary, 19, Market Square, Northampton.

CINQUB PORTS FLYING CLUB, LTD.

[Aug. 25-31].—Pilot Instructor: K. K. Brown. Ground Engineer: R. H. Wynne. Aircraft: D.H. Moths RI and PM. Total for week: 34 hrs. 30 mins. Dual instruction: Total, 15 members, 17 hrs. 50 mins. Soloists under instruction: Total, 3 members, 5 hrs. 45 mins. "A" pilots: Total, 6 members, 7 hrs. 15 mins. "B" pilot: Mr. Kirsten, 15 mins. Joyrides: 8 members, 1 hr. 25 mins. "B" pilot: Mr. Kirsten, 15 mins. Joyrides: 8 members, 1 hr. 25 mins. Tests: 12 members, 2 hrs.

The week opened well on Sunday, the 25th, with an astonishing performance on the part of Dr. Furlong, of Dublin, Ireland. Dr. Furlong joined the Club on August 17, and it was necessary for him to return to Ireland on Monday and Mr. Brown launched him solo at 14.38 hrs. He made a very good performance on his first solo flight; and throughout the afternoon flew consistently well, and by 19.16 hrs. he had completed all his flight tests for A" licence on his first solo flight; and throughout the afternoon flew consistently well, and by 19.16 hrs. he had completed all his flight tests for A" licence in excellent style.

In addition to obtaining two "A" licences on Sunday, August 25, Mr. Brown beat all previous club records for one day's flying by keeping the distance flown of 825 miles by the two machines in the one day. On this day we had the pleasure of a visit from the Vicompte Jacques de Sibour, who recently flew round the world with his wife, in his Moth. He brought with him to Lympne, Squadron Leader Jones-Williams, who was senior

pilot of the Fairey-Napier monoplane which recently flew to India non-stop; Flight-Lieut. Fressanges, who was one of the pilots of the Vickers Victoria aircraft which effected the historic rescues from Kabul; and Mr. Gordon Selfridge, who is learning to fly at the present time. Altogether this Sunday was a record day in many respects for the club.

On Wednesday, August 28, we were honoured by a visit from our President, Earl Beauchamp, K.G., Lord Warden of the Cinque Ports, accompanied by his son Lord Elmlie, who is learning to fly with the Norfolk and Norwich Club. Unfortunately, a high wind prevented much activity, but Lord Elmlie was taken for a short flight by Mr. Brown.

On Thursday, August 29, we had a further success when Mr. L. Milton was launched solo, and put up an excellent performance.

Messrs. Parker and Prangnell were new members who commenced instruction during the week.

It was thought that we should be unable to beat our record for July until another machine was in commission, as it seemed that that record of 124 hours was about the limit for a club working with only one instructor and two machines, but during August Mr. Brown established a new record for the club, the two machines making 331 flights totalling no less than 139 hrs. 10 mins. in the air, an equivalent to a distance flown of over 10,000 miles. This total represents a splendid achievement, upon which the club heartily congratulates Mr. K. K. Brown and his staff. Mr. Brown himself actually flew over 96 hours in 27 flying days, which represents very hard work. The membership at the end of August totalled 111.

The club will be closed for holidays on the evening of October 6, re-opening on October 16.

HAMPSHIRE AEROPLANE CLUB

(Aug. 24-30).—Pilot Instructors: Mr. W. H. Dudley. Ground Engineers: Messrs. E. Lenny and S. Riches. Aircraft: Gipsy Moth G-AAJR, Avian G-EBVI and Spartan G-AAFR. Flying time for the week, 61 hrs. 30 mins. Dual instruction: 32 hrs. 5 mins. Solo flying; 5 hrs. 25 mins. "A" pilots: 21 hrs. 50 mins. Passengers, 40 mins. Instructors, solo and tests: 1 hr. 30 mins. 21 hrs. 5 30 mins.

(Aug. 31-Sept. 6).—Flying time for the week ended September 6:50 hrs. 35 mins. Dual instruction: 19 hrs. 25 mins. Solo flying: 9 hrs. 50 mins. "A" pilots: 19 hrs. 25 mins. Passengers: 50 mins. Instructors, solo and tests: 1 hr. 5 mins.

Flying Time for the Month ended September 30. Total time for the month: 195 hrs. 30 mins. Dual: 98 hrs. 25 mins. Solo: 15 hrs. 20 mins. "A" pilots: 74 hrs. 15 mins. Instructors, solo and passengers: 7 hrs. 30 mins.

Notes.

It is gratifying to report that no less than 31 new members joined the

club during August.

Messrs. Angus, Vernon and Turner completed the tests for their "A"

A Gipsy Moth has now been acquired by the club mainly owing to the generosity of members who subscribed a large sum towards its purchase. It has proved very popular with members, and is in consequence, being worked exceedingly hard.

LANCASHIRE AERO CLUB

Week ending August 24.—Flying time: 29 hrs. 35 mins. Instruction: (11), 6 hrs. 40 mins. Solo flights: (18), 13 hrs. 15 mins. Passenger flights: (23), 7 hrs. 10 mins. Tests: (14), 2 hrs. 30 mins.

Instruction: With Mr. Hall: Braid, Sellars, J. C., Moore, Brocklehurst, Barlow, Blake, A. Benson. With Mr. Scholes: W. Russell, J. C. Sellars, Barlow, Griffis.

Machines in commission: AD, EC, MQ.

Solo Pilots: Meads, Goss, D. Nelson, Mills, Lacayo, Lister, Williams, Gattrell, W. Ashworth, Butt, Kay, Whitehouse, Serck, Maxwell, Barlow, Hardy, Michelson, R. F. Hall.

Passengers, with Mr. Meads: Jones, Mrs. Brimelow. With Mr. R. F. Hall, Miss Ogden, Booth, Brierley. With Mr. R. F. Hall: Allan, Fallon, Ashworth, Sellars. With Mr. Lacayo: Jackson, Benson, Aston. With Mr. Scholes: Mills, Spencer, Kershaw, Crabtree, Ashworth. With Mr. Butt; Miss Foxwill, Redfern. With Mr. Williams: Butt. With Mr. Gattrell; Miss Wilmshaw. With Mr. Mills: Lawton, Brown.

The following new member commenced instruction: Blake.

SUFFOLK & EASTERN COUNTIES AEROPLANE CLUB

Week ending August 24.—Chief Instructor, G. E. Lowdell. Instructor, H. M. T. Clayton. Ground Engineers, T. Mayhew, H. Brown. Aerodromes, Hadley, Suffolk, Conington, Cambridge. Aircraft—Blackburn Bluebirds, BF, BE, UH, RE, SZ.

Suffolk Aero Club.—Total time flown, 29 hrs. 5 mins. Seventeen members were given dual instruction, 20 hrs. 10 mins. Four members flew solo under instruction, 2 hrs. 20 mins. "A" and "B" Licence pilots flew 2 hrs. 55 mins. Twelve passengers were carried, 55 mins. Eleven tests were made 1 hr. 5 mins. Cross-country, 1 hr. 40 mins.

Cambridge Aero Club.—Total time flown, 12 hrs. 55 mins. Eight members were given dual instruction, 4 hrs. 45 mins. Two members flew solo under instruction 4 hrs. 55 mins. "A" Licence pilots flew 1 hr. 50 mins. Six passengers were carried, 30 mins. Seven tests were made, 55 mins.

MIDLAND ABRO CLUB

(Aug. 25-31).—Total flying time, 37 hrs. Dual, 18 hrs. 15 mins.; solo 14 hrs. 25 mins.; passenger, 4 hrs.; test, 20 mins. Dual instruction by Messrs. W. H. Sutcliffe and T. W. J. Nash, A.F.M.:—C. P. A. Adams, T. B. Hallam, Mrs. Vereker, L. W. Farrer, G. Norton, A. C. Isaac, P. Stone, J. E. Yardley, E. C. Merrick, G. Mander, F. T. Lydall, Mrs. Burnett, P. N. Patel, A. F. Hill, J. H. Vickers, T. G. Ellison, C. T. Davis, H. A. Taylor, T. W. Wild, P. B. A. Vallance, H. Beamish, W. H. Craven. Advanced dual:—K. S. Neale, S. Duckitt, F. G. Robinson. "A" pilots:—E. P. Lane, R. L. Jackson, S. H. Smith, H. J. Willis, J. Rowley, R. L. Laidlaw, W. L. Handley, F. G. Robinson, F. B. Hackett, J. K. Morton, J. R. Bond, E. D. Wynn, W. M. Morris, S. Duckitt, J. Cobb, K. S. Neale. Soloists:—F. Norman, H. A. Taylor, G. P. Haylock, Maj. D. Thomson, H. E. Evans, F. T. Lydall, Mrs. Vereker, T. G. Ellison, P. Stone, E. C. Merrick.

Passenger flights were given to 11 members. Messrs. G. P. Haylock, F. Norman, F. T. Lydall, T. O. Ellison, and Maj. D. Thomson passed the flying tests for their "A" licence. Mrs. R. Vereker and Mr. E. C. Merrick successfully made first solos.

(Sep. 3-9).—The total flying time was 33 hrs. 55 mins. Dual: 13 hrs.

successfully made first solos.

(Sep. 3-9).—The total flying time was 33 hrs. 55 mins. Dual: 13 hrs. 25 mins. Solo: 16 hrs. 20 mins. Passenger: 3 hrs. 10 mins. Test: 1 hr. The following members were given dual instruction by Mr. T. W. J. Nash, A.F.M.: J. H. Vickers, A. F. Hill, G. Norton, P. Stone, W. H. Craven, Mrs. Vereker, G. Mander, Mrs. Burnett, C. T. Davis, T. J. Munro, P. M. Patel, Harvey Sangster, C. Blakeway, H. A. Taylor, R. A. Ridsdale, H. Beamish, B. P. A. Vallance, C. P. Adams, L. W. Farrer.

Advanced dual: S. G. Hall, R. B. Laidlaw.

"A" Pilots: S. Duckitt, J. K. Morton, F. G. Robinson, K. S. Neale, J. R. Bond, J. Cobb, R. L. Jackson, W. Morris, H. E. Evans, F. J. Steward. R. B. Laidlaw, F. Norman, F. T. Lydall, W. L. Handley.

Soloists: B. P. A. Vallance, P. Stone, Mrs. Vereker, H. A. Taylor. Passenger flights were given to 11 members.

Mr. P. Stone carried out the flying tests for his "A" licence.

NEWCASTLE-UPON-TYNE ABRO CLUB

NEWCASTLE-UPON-TYNE ABRO CLUB

(Aug. 26-Sept. 1).—Instructor: G. M. S. Kemp. Engineer: W. Dunning.
Assistant: J. Tait. Aircraft (3): PT. LX, QV. Flying time, 40 hrs. 40
mins. Instruction, 26 hrs. 5 mins.; "A" pilots, 4 hrs.; solo training,
8 hrs. 10 mins.; passengers, 1 hr. 25 mins.; tests, 1 hr.
Notes.—Mr. G. Shaw, one of our pilot members, completed his first solo
flight very successfully. Two of our pupils completed the tests for their
"A" licence, Messrs. Middleton and Mays. Wednesday saw the arrival of
Lady Bailey, followed by Nigel Norman and the Marquis of Clydesdale, who
all stopped to refuel while going north to Stobo. The amount of flying
done by our licensed pilots does very little to encourage the budding young
aviators; indeed, those people on solo training seem to be more enthusiastic
to fly. Flying Officer H. Leech, one of our members, paid us a visit on

Sunday in a Siskin, while shortly afterwards a Hyderabad landed with seven

Sunday in a Siskin, while shortly atterwards a regulation.

Sep. 2-8).—Flying time: 47 hrs. 20 mins. Instruction: 34 hrs. 5 mins.

Solo training: 2 hrs. 50 mins. "A" pilots: 7 hrs. 45 mins. Passengers: 1 hr. 45 mins. Tests: 55 mins.

The weather this week has been fairly kind to us so far, and we have been permitted to put in a good number of flying hours as a result.

Wednesday again saw other two of our pupils launched on their first solo flight, namely Messrs. Kendrick and King. At present, there are only two machines on service, PT being in dock for a renewal of C of A. We hope that it will not be long before we have it flying again.

THE NORTHAMPTONSHIRE AERO CLUB

(August 29).—Instructor: E. F. Palmer. Ground engineer: J. B. Gallagher. Aircraft: 2 (IE and IC). Dual instruction, 29 hrs. 15 mins.; solo, 10 hrs. 15 mins.; passengers, 16 hrs. 20 mins.; tests, 7 hrs. 40 mins. Total, 63 hrs. 30 mins.

During the month Mr. Eales and Mr. Bayes made their first solo, on the 13th and 18th respectively.

Mr. S. P. Tyzack, who was the first member to go solo, has distinguished himself by being the first club member to perform aerobatics.

This month has been a distinct improvement in flying time. The week ending August 31 was a record week with 25 hours. On September 28 the Club are holding a week-end flying meeting at which all other club members and private owners are welcome. Accommodation on the Saturday night will be arranged if required, and intending visitors should communicate with the Secretary, 19, Market Square, Northampton. The meeting will include a novelty competition, which is being arranged by Mr. Broad, and a competition for private owners, for which cups are being presented by members of the club.

FROM THE FLYING SCHOOLS

Brooklands School of Flying, Brooklands Aerodrome

Flying time 71 hrs.

A high average time still maintained owing to kind weather and keen pupils. We have one piece of good news for habitus of Brooklands, and that is that Joe King has once more returned to England from South America and has joined our permanent staff of instructors, thus giving us a trio that it would be hard to beat at any school or club in the world. We congratulate the following on passing their "A" licence tests in good style—Messrs. Chichester and Daubenny, not to mention a very old friend of all down here, Mr. Matos, our Bolivian pupil. Mr. Daubenny, a local resident, on completion of his test, had only done 8 hrs. flying altogether, which goes to prove that it pays to concentrate on instruction while doing it. During the week the following joined the school—Messrs. Wootton, Slaney, Lu (the fifth Chinese to pass through the school).

(Week finding Aug. 18).—Flying time: 62 hrs. 10 mins. Private owner upils: 55 hrs.

pupils: 55 hrs.

A Moth joystick has been found in an adjoining garden. We strongly suspect one of our instructors of trying to instil confidence in a refractory pupil by heaving it overboard.

The School is now completely international. Among our pupils are nationals of Holland, Sweden, United States, China, Bolivia, Bombay, New Zealand and even Wales. The United States leads at present by getting his ticket within seven days from the time of his first flight. Wales is running a close second.

(Aug. 26-Sept. 1).—Flying time, 84 hrs. 50 mins. Passengers carried, 603. The busiest week that has been known down here, favoured with fine weather as we were. Many of our pupils have been concentrating on flying of late, and are showing their good sense in this because they save two or three hours before their first solo.

Summing up the last month's flying, we find that the school machines in four weeks have done 274 hours, in which time six pupils have got their licences and six more are ready to do their height tests. Passengers carried during the month, 2,046.

(Sep. 2-8).—Flying time, 73 hrs. 20 mins. This week has seen considerable activity in all departments. In spite of the school itself being closed on the day of the Schneider Trophy race, the school machines alone have done 56 hrs. flying, the balance of hours being flown by our machine at Clacton. The following have passed their tests for "A" licences: Messrs. Wootton, Christian, Baker, Briggs.

On Saturday last nearly all the machines proceeded to Hamble and the Isle of Wight to see the Schneider Trophy race; it was heard said on their return that even one of our Renault Avros seemed to be imbued with fresh life on the homeward journey!

The Phillips and Powis School of Flying

(WEEK ENDING Aug. 22.)—Flying time: 24 hrs. 40 mins. Instructor: Mr. H. B. G. Michelmore. Notes:—We have now in our showroom on the aerodrome a new D.H. Gipsy Moth Coupé. Messrs. Scragg and Linton have this week joined the school.

(Aug. 23-29).—Flying time, 15 hrs. Mr. de Fraine has this week made a very successful first solo after only 5 hrs. 25 mins. dual instruction.

The following new pupils have joined the school:—Messrs. Crawshaw. Belcher, and Allen.

(Aug. 30-Sept. 5).—Flying time, 22 hrs. 25 mins. The following new pupils have joined the school:—Messrs. Belcher, Crawshaw, Hayne, and Pook.

OVERSEAS CLUBS

Singapore Flying Club
(JULY 14-20).—Total flying time, 14 hrs. 20 mins. Dual instruction, 10 hrs. 45 mins.; solo flights, 2 hrs. 20 mins.; tests, 1 hr. 15 mins.
We have received advice to the effect that our new instructor is due to arrive in Singapore on August 24.

(JULY 21-27).—Total flying time, 13 hrs. 35 mins. Dual instruction, 7 hrs. 55 mins.; solo flights, 3 hrs. 20 mins.; passenger flights, 1 hr. 25 mins.; tests, 55 mins.

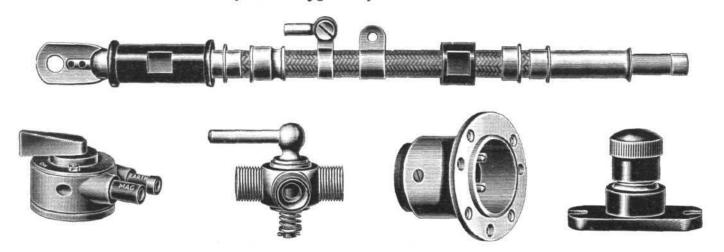
On July 26, G-EBUK had a float badly damaged, due to hitting a buoy when landing, and, in spite of all endeavours to get it beached in time, it sank in shallow water. It was, however, only about half an hour before we were able to get the machine ashore, but the engine had been totally immersed during that time.



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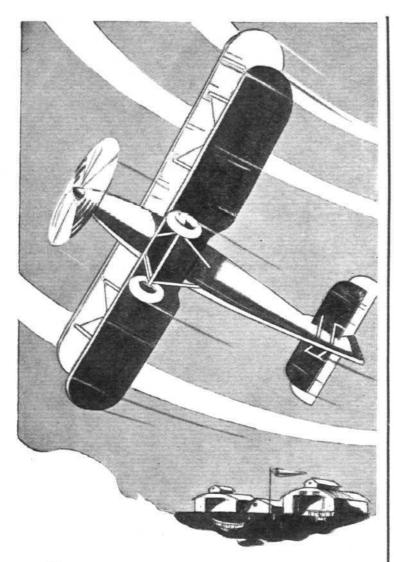
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THE London Air Park at Hanworth, headquarters of the N.F.S. flying organization, is the ideal instructional centre, where the flying pupil may qualify for the Air Ministry "A" Licence for private pilots quickly and at the minimum of expense.

Experience shows that the average flying member is able to "pass out" after a period of from 13 to 20 hours' training. The minimum under N.F.S. rules is eight hours' "dual" instruction and five hours' "solo" flying, the cost of this minimum course being under £25.

Not only is Hanworth one of the largest air parks in the country, but as a Country Club it is unexcelled. The club itself provides first-class residential accommodation, lounges, dressing and drawing rooms, writing-room, ball-room, and an excellent standard of catering. Tennis and squash racquets courts provide facilities for outdoor recreation. The Hanworth estate covers an area of 230 acres.

A limited number of members are now being enrolled at the following rates; Flying Members, 5 gns. entrance fee and 5 gns. annual subscription; Non-flying Members, 3 gns. in each case. For 1929 two-thirds of the annual subscription is rebated. Serving Officers of H.M. Regular Forces are admitted without entrance fee. Membership of Hanworth Club confers honorary membership of all other N.F.S. clubs and free use of every N.F.S. station. Private flying for qualified members costs as little as £1 ls. an hour (3½d. a mile). Residential terms at Hanworth range from 5½ to 7 guineas per week.

Write to-day for the N.F.S. brochure that fully describes the privileges of membership and enumerates the services offered to all who wish to fly.



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Feltham 236.

London Gazette, September 3, 1929.

General Duties Branch

Pilot Officer R. C. Warner is promoted to rank of Flying Officer (June 30). Wing Commander H. Blackburn, M.C., A.F.C., is placed on retired list (Ang. 29). Lieut. J. F. M. Robertson, R.N., Flying Officer, R.A.F., ceases to be attached to R.A.F. on return to Naval duty (Aug. 16).

Accountant Branch

Squadron Leader E. W. Gregory, M.C., is placed on half-pay list, Scale A. Aug. 31, to Nov. 4, 1929, inclusive.

Medical Branch

The follg. Flying Officers are granted permanent commns. in this rank (Sept. 4):—G. H. J. Williams; J. C. Neely, B.A.; J. Kemp, M.B. Flying Officer J. M. Ritchie, M.B., is promoted to rank of Flight-Lieut. (Sept. 1). Flying Officer A. C. Lysaght resigns his short-service commn. (Sept. 3).

Chaplains' Branch

The folls. Chaplains are promoted to relative rank of Wing Commander:—The Rev. M. H. Edwards, O.B.E., B.A.; the Rev. C. A. B. Allen, M.A. (Aug. 6); the Rev. G. H. Collier, M.A. (Aug. 12).

RESERVE OF AIR FORCE OFFICERS

General Duties Branch

The follg. Pilot Officers on probation of Special Reserve are confirmed in rank;—P. F. Channing (June 8); G. D. S. Horsfall (July 2).

The follg. Flying Officers relinquish their commns. on completion of service: W. J. McDonough (Feb. 22); J. Spooner (Aug. 27). Flight-Lieut. H. M. Ireland, D.F.C., relinquishes his commn. on completion of service, and is permitted to retain his rank (Aug. 5). Flying Officer H. Tulloch relinquishes his commn. on account of ill-health, and is permitted to retain his rank (Sept. 4). The commn. of Pilot Officer on probation R. P. Donnelly is terminated on cessation of duty (April 21).

Medical Branch

Medical Branch
Flight-Lieut. J. D. Driberg is granted a commun. in Class D.D. (Aug. 20)
Squadron Ldr. H. Harvey relinquishes his commun. on completion of service and is permitted to retain his rank. (Aug. 1).

AUXILIARY AIR FORCE

Medical Branch

No. 601 County of London (Bomber) Squadron,—Fight-Lieut. J. D.

Driberg resigns his commn. on appointment to Reserve of Air Force Officers;

Aug. 20. Flight-Lieut. E. D. W. Reid is transferred from General Duties

Branch; (Aug. 21).

ROYAL AIR FORCE INTELLIGENCE

Appointments.—The following appointments in the Royal Air Force are notified:—

Wing Commanders: R. J. F. Barton, O.B.E., to No. 1 Flying Training Sch., Netheravon, to Command, 31.8.29. J. T. Babington, D.S.O., to Air Ministry (C.A.S.) for Air Staff duties, 31.8.29. Sir C. J. Q. Brand, K.B.E., D.S.O., M.C., D.F.C., to R.A.F. Depot, Middle East, for Engineer duties,

Ministry (C.A.S.) for Air Staff duties, 31.8.29. Sir C. J. Q. Brand, K.B.E., D.S.O., M.C., D.F.C., to R.A.F. Depot, Middle East, for Engineer duties, 9.8.29.

Squadron Leaders:—C. Boumphrey, D.F.C., to H.M.S. Hermes, 11.8.29. W. R. Cox, M.C., A.F.C., to No. 12 (Bomber) Sqdn., Andover, 1.9.29. W. R. Cox, M.C., A.F.C., to No. 504 (Bomber) Sqdn., Nottingham, 19.8.29. R. S. Sugden, A.F.C., to No. 501 (Bomber) Sqdn., Filton, 26.8.29. Flight Lieutenants: A. J. Elliott, to R.A.F. Depot, Uxbridge, 1.9.29. 1. M. Rodney, to H.Q., Air Defence of Gt. Britain, Uxbridge, 14.9.29. H. G. Sawyer, A.F.C., to R.A.F. College, Cranwell, 4.7.29. N. H. D'Aeth, to No. 204 (Flying Boat) Sqdn., Cattewater, 31.8.29. H. R. F. Baxter, to Armament and Gunnery Sch., Eastchurch, 2.9.2.9. R. Duncanson to No. 35 (Bomber) Sqdn., Bircham Newton, 16.8.29. T. S. Ivens, to H.Q., Wessex Bombing Area, Andover, 22.9.29. W. E. Theak, to No. 13 (A. Co-op.) Sqdn., Andover, 31.8.29. E. J. L. Hope, A.F.C., to No. 17 (Fighter) Sqdn., Upavon, 1.9.29. M. H. Ely, to R.A.F. Base, Calshot, 16.9.29. H. M. Mellor, to R.A.F. Depot, Uxbridge, 26.8.29. H. M. Groves, to No. 27 (Bomber) Sqdn., India, 2.8.29. M. E. B. P. Storrie, to No. 14 (Bomber) Sqdn., Palestine, 14.8.29. W. E. Knowlden, to 26 (A. Co-op.) Sqdn., Catterick, 2.9.29. Flying Officers:——D. Dickson, to Armament and Gunnery Sch., Eastchurch, 2.9.29. H. H. V. Tristem, to No. 5 Flying Training Sch., Sealand, 22.9.29. H. W. Pearson-Rogers, to No. 24 (Communications) Sqdn., Northolt, 4.9.29. J. C. C. Slater, to Armament and Gunnery Sch., Eastchurch, 2.9.29. H. W. Pearson-Rogers, to No. 24 (Communications) Sqdn., Northolt, 4.9.29. J. C. C. Slater, to Armament and Gunnery Sch., Eastchurch, 2.9.29. H. W. Pearson-Rogers, to No. 26 (Communications) Sqdn., Northolt, 4.9.29. J. C. C. Slater, to Armament and Gunnery Sch., Eastchurch, 2.9.29. H. J. G. E. Proud, to Armament and Gunnery Sch., Eastchurch, 2.9.29. H. J. G. E. Proud, to Armament and Gunnery Sch., Eastchurch, 24.8.29.

Pilot Officers: The undermentioned Pilot

Sqdn., Upavon. R. C. Keary and A. O. Molesworth, to No. 26 (Fighter) Sqdn., Hawkinge. K. W. Niblett, to No. 100 (Bomber) Sqdn. Bicester. S. S. Murray, M. L. Heath and W. S. Hebden, to No. 16 (A.C.) Sqdn., Old Sarum. K. P. Lewis and R. C. Mead, to No. 26 (A.C.) Sqdn., Catterick. E. R. Simonds, to No. 43 (Fighter) Sqdn., Tangmere. R. E. de T. Vintras and I. B. Newbigging, to No. 33 (Bomber) Sqdn., Netheravon. W. V. L. Spendlove and Lord M. A. Douglas-Hamilton, to No. 3 (Fighter) Sqdn., Upavon. W. T. F. Wightman, E. J. Corbally, and A. D. Selway, to No. 1 (Fighter) Sqdn., Tangmere. H. R. L. Hood, to No. 23 (Fighter) Sqdn., Kenley. F. A. J. Pollock-Gore, to No. 35 (Bomber) Sqdn., Bircham Newton. F. K. Wood, to School of Naval Co-operation, Lee-on-Solent; 16.8.29. O. W. Hoffman, to R.A.F. Depot, Uxbridge; 15.7.29. P. S. Hession, to R.A.F. Depot, Uxbridge; 8.7.29.

Stores Branch
Flight-Lieut.: S. D. Dennis, to No. 5 Flying Training Schl., Sealand;

17.8.29.

17.8.29.

Flying Officers: D. G. McDiarmid, to No. 2 Stores (Ammunition) Depot, Altrincham; 17.8.29. C. S. Whellock, to Station H.Q., Upper Heyford; 17.8.29. C. B. Horsfield, to H.Q., Inland Area; 19.9.29.

Medical Branch
Squadron Leaders: J. Rothwell, M.B., to No. 23 Group H.Q., Grantham;
16.9.29. K. Biggs, M.C., D.P.H., to R.A.F. Depot, Uxbridge; 26.9.29.
R. E. Bell, M.B., to H.Q., Inland Area, Stanmore; 20.9.29.
Flight-Lieuts.: J. P. Hederman, to Station H.Q., Hendon; 16.9.29.
G. P. O'Connell, M.B., to H.Q., R.A.F., India; 16.8.29. B. Fitz-James
Haythornthwaite, M.B., to Armament and Gunnery Schl., Eastchurch;
18.9.29. L. I. Hyder, to R.A.F. Depot; 30.8.29. L. C. Palmer-Jones, M.B.,
to R.A.F. Base, Malta; 5.8.29. J. Magner, M.B., to Aircraft Park, India;
5.8.29.
Flying Officer: L. O'Conner, to No. 28.44 Co. C. C.

Flying Officer: L. O'Connor, to No. 26 (A.C.) Sqdn., Catterick; 27.8.29.

Chaplains' Branch
Rev. J. A. Jagoe, M.A., to H.Q., R.A.F., Cranwell; 1.9.29.

NAVAL APPOINTMENT

The following appointment was made by the Admiralty on Sept. 2:— Lieut. $\{F./O.,\ R.A.F.\}$.—G. M. Pares, to Vindictive; Sept. 2.

the sea must not be undertaken until triple-engined aircraft the sea must not be undertaken until triple-engined aircraft are available. The loss in revenue will be considerable, and it is with the greatest reluctance that the company turn away this lucrative traffic, but it is felt that "Safety first" must be the guiding principle of Northern Air Lines, so until the new triple-engined 'planes are delivered Manchester people will not be able to cross the sea by air.

The firm is making no alteration in ordinary cross country.

The firm is making no alteration in ordinary cross-country journeys and will continue to use single-engined machines

where no sea crossing is necessitated.

Sea journeys not carrying passengers will be continued as at present, i.e., goods and newspaper photographs will be accepted as usual.

If a single-engined 'plane is forced to land owing to engine trouble, a safe landing can almost always be made if over land, but it is felt that engine trouble while over the sea might have serious results, although the aeroplanes are usually in touch with shipping and carry special life-belts.

Two triple-engined all-metal air liners have been ordered

and delivery is promised early in the new year; these machines are luxuriously fitted, having heated cabins, lavatory,

One of these machines will probably go on to the Isle of Man service next spring, and the other will be used for general work to London and the Continent.

Afternoon tea trips over Manchester are to be a feature of the company's activities next year, passengers being taken for an hour's flight over the city and served with tea while in the air.

"The Book of the ' Moth '":-Can there be a mortal left on earth who does not know all there is to know about a De Havilland "Moth." If there is he must be deaf, blind and dumb. If you study the psychology of the success of this light aeroplane you must come to the conclusion that the producers have the faculty of doing everything well. They produce a good machine and they know how to sell it. The popularity of any car, motor-cycle or aeroplane does not solely depend upon slick publicity. An article must possess intrinsic value in order to sustain popularity. When you shed the "Moth" of all its glory you come to the fact that it is a good aeroplane. You may explain away its success as being due to unique publicity methods, or to the start it obtained over rivals, and you still discover that it is a good aeroplane. That is the secret of its sustained success throughthe world. We will not trouble to detail the contents of the "Book of the 'Moth." We will only advise our readers that they cannot afford to be without a copy. The price 15 18 6d., and it is cheap at that. Apply to the he Havilland Aircraft Co., Ltd., Stag Lane Aerodrome, Edgware, Middlesex.

Northern Air Lines Safety Campaign
Northern Air Lines have decided that in future no
bassengers will be carried on journeys which involve a sea

cossing in single-engined aircraft.

The company has been doing a considerable amount of business taking passengers from Manchester to Dublin, Belfast and Douglas, but has now decided that journeys over

SOME SCHNEIDER TROPHY ITEMS

The King's Congratulations

His Majesty the King sent the following telegram to

Lord Thomson, Minister for Air:

"Heartiest congratulations to Flying Officer Waghorn and the Royal Air Force on the success which they have attained in the Schneider Trophy race."

The Air Force Cross for Waghorn

LORD THOMSON, Minister for Air, announced at a luncheon given in honour to the British and Italian teams at the Ritz Hotel on September 11, that H,M. the King would confer the Air Force Cross on Flying Officer Waghorn.

More Congratulations

THE Royal Aeronautical Society and Inst. Aeronautical Engineers sent the following congratulatory telegrams, signed by the President of the Society:—

To Messrs. Supermarine Aviation Works.—All members join in sending your Chief Designer (Mr. Mitchell) and all con-cerned with the production of the S.6, that performed so brilliantly and victoriously today, extremely cordial congratulations.

To Brig.-General the Right Hon. Lord Thomson, Minister for Air.—May I offer through you to the Royal Air Force High Speed Flight as a whole, and to Flying Officer Waghorn in particular, the Royal Aeronautical Society's profound

congratulations.

To Mr. Royce of Messrs. Rolls-Royce, Ltd.—All members of the Royal Aeronautical Society join together in paying tribute to your outstanding genius, which, with the collaboration of your assistants and workmen in Rolls-Royce, resulted in the production in record time of your remarkable new type engine.

Celebrities at Cowes

As on the occasion of yachting functions Cowes was an important centre for the Schneider Trophy Contest. The roadstead was thronged with gaily decorated yachts and other craft, while H.M.S. Iron Duke and the Aircraft Carrier Argus were in prominent positions in the Cowes anchorage.

The Prince of Wales flew down to Cowes on the Friday, and was the guest of Sir Philip Sassoon, Chairman of the Royal Aero Club, at Nubia House. After a round of golf at Osborne on Saturday morning, His Royal Highness witnessed the Contest, in company with Sir Philip Sassoon, from Sir Henry Seagrave's speed-boat White Cloud II. The Prince also visited Calshot after the race and personally congratulated the British Team. When he returned to Cowes he was given an enthusiastic reception at the Royal Yacht Squadron. Later in the evening he flew back to London in his D.H. "Moth," piloted by Sq.-Ldr. Don.

Among the many celebrities at Cowes were Senator and Donna Marconi (in their yacht *Electra*), Air Chief Marshal Sir John Salmond and the Hon, Lady Salmond, Capt. the

Hon. Frederick Guest, etc.

On the "Argus" and "Iron Duke"

The Prime Minister, Mr. Ramsay MacDonald, with Miss Ishbel MacDonald, witnessed the Contest from the aircraft carrier Argus, as did Princess Beatrice, Sir Samuel and Lady Maud Hoare, and Admiral Mark Kerr

The Iron Duke, as flagship of Admiral Sir Roger Keyes, had some 400 guests on board, including the First Lord of the Admiralty, Admiral Sir Reginald Tyrwhitt, and Vice-Admiral Sir Ernle Chatfield, Commander-in-Chief Atlantic Fleet

Schneider Trophy Calling!

THE Broadcast of the Schneider Trophy contest was a great success, and "came over" remarkably well. It was heard not only throughout Great Britain and the Continent, but in America and Australia as well. The commentary on the progress of the contest, with lap speeds, accompanied by the roar of the engines as the machines passed the " mike " on Ryde pier gave listeners a realistic impression of the "race." It was quite easy to distinguish the various competitors by the different pitch or note produced by the roar of the engine. Perhaps the most realistic impression of the speeds attained was given when the commentator called out the names of the places along the mainland as Waghorn passed over them-just like a railway porter calling out the names of stations a train is scheduled to stop at!

"Flying Squad's" Good Work

THE Scotland Yard "Flying Squad" also got in some good work during the Schneider Trophy contest, when they arrested a clever international gang of pickpockets (comprising five Italians, two Belgians and a Spaniard) at Southsea.

" Accessory to the Fact "

THE success achieved by Flying Officer Waghorn in winning the Schneider Trophy is shared by all those who contributed towards the production of the machine and engine. As regards the Supermarine S.6, it should be noted that the Supermarine Aviation Works, Ltd., the designers and constructors, are associated with Vickers (Aviation), Ltd., who hold the whole of the capital in the former company.

The Rolls-Royce engine of the S.6, the most powerful aero engine in the world, was helped in its good work by B.T.H. Magnetos and Lodge Plugs (which were also fitted to the other S.6's engine), while Hoffmann ball and roller bearings also made things run smoothly in this great event. In the construction of the machine Firth Staybright steel

was employed for several parts, such as the combined tail-fin and oil cooler, water system couplings, spar coupling hinge fittings, etc. The English Steel Corp. (Vickers) also supplied a number of items so far as the metal work was concerned, while the "lighter" side was attended to by the British Aluminium Co. Ltd.

The success of both machine and engine could easily be marred by an unsuitable airscrew, so special note should be made of the wonderful results obtained with the Fairey

metal airscrew fitted to the S.6.

We need hardly mention that S. Smith & Sons (M.A.) Ltd. supplied the instruments fitted in Waghorn's spacious cockpit!

The Tecalemit Greasing equipment was also one of the minor but important items that played its part in the Schneider

Finally, Waghorn achieved his splendid win on Pratt's Aviation Spirit.

Last Week's Issue of "Flight"

The Publisher of Flight offers his regrets to those unable to obtain copies of last week's Schneider Souvenir Number, owing to the great demand for the issue—although extra supplies were despatched to various points, these, like the earlier deliveries, were almost at once exhausted. Ordering copies beforehand is, as advised the previous week, always a wise policy.

386 186

PUBLICATIONS RECEIVED

Aerial Navigation and Meteorology. By Capt. L. A. Yancey. The Norman W. Henley Publishing Co., 2, West 45th Street, New York, U.S.A. Price 4 dols.

Light Alloys in Industry. The British Aluminium Co., Ltd., Adelaide House, King William Street, London, E.C.4.

Light Alloys in Aircraft. The British Aluminium Co., Ltd., Adelaide House, King William Street, London, E.C.4. One Man's War. By Bert Hall and John J. Niles. John Hamilton, Ltd., 42, Great Russell Street, W.C.1. Price 15s.

AERONAUTICAL PATENT SPECIFICATIONS

(Abbreviations: Cyl. — cylinder; i.e. — internal combustion; m. — motor.

The numbers in brackets are those under which the Specifications will be printed and abridged, etc.)

APPLIED FOR IN 1928

Published September 12, 1929

H. N. Green. Beacons, lighthouses, etc. (317,505.)
M. J.B. Barbarou. Arrangements for oil-pumps upon aviation engines. (305,016.)

APPLIED FOR IN 1929

Published September 12, 1929

2,904. Waterbury (305,629.) Tool Co. Airship-mooring masts and controls

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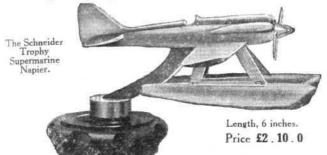
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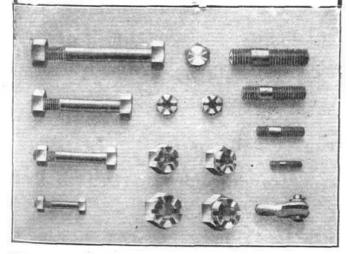
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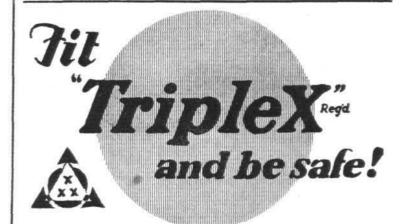
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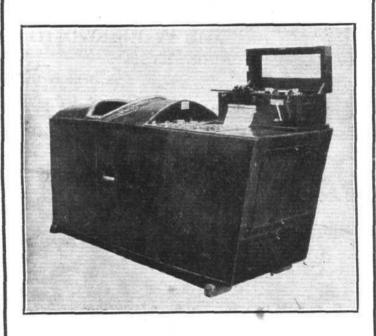
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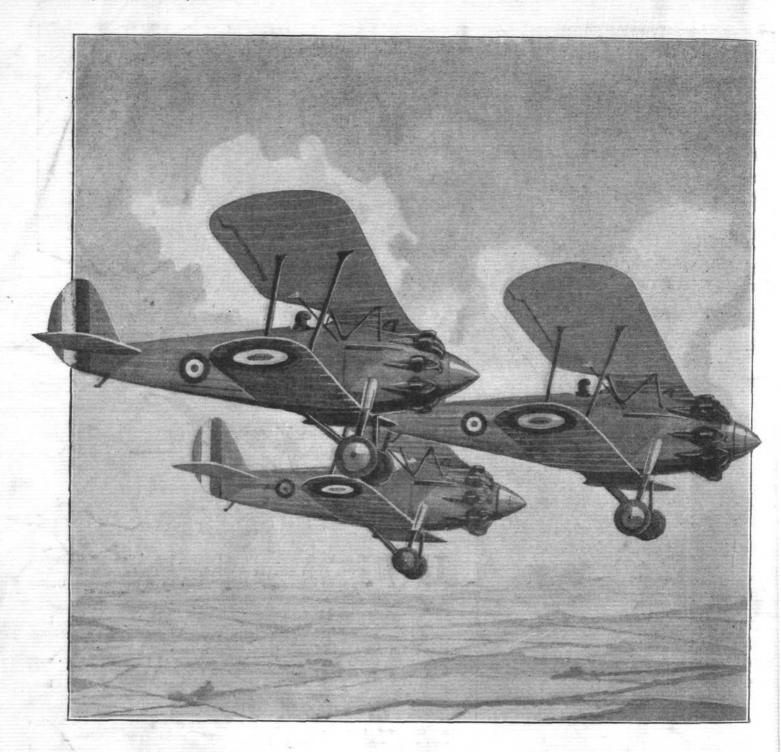


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